IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

SONTERRA CAPITAL MASTER FUND, LTD. and HAYMAN CAPITAL MANAGEMENT, L.P., on behalf of themselves and all others similarly situated,

Plaintiffs,

- against -

UBS AG, UBS SECURITIES JAPAN CO. LTD., MIZUHO BANK, LTD., THE BANK OF TOKYO-MITSUBISHI UFJ, LTD., THE SUMITOMO TRUST AND BANKING CO., LTD., THE NORINCHUKIN BANK, MITSUBISHI UFJ TRUST AND BANKING CORPORATION, SUMITOMO MITSUI BANKING CORPORATION, RESONA BANK, LTD., J.P. MORGAN CHASE & CO., JPMORGAN CHASE BANK, NATIONAL ASSOCIATION, J.P. MORGAN SECURITIES PLC, MIZUHO CORPORATE BANK, LTD., DEUTSCHE BANK AG, DB GROUP SERVICES UK LIMITED, MIZUHO TRUST AND BANKING CO., LTD., THE SHOKO CHUKIN BANK, LTD., SHINKIN CENTRAL BANK, THE BANK OF YOKOHAMA, LTD., SOCIÉTÉ GÉNÉRALE SA, THE ROYAL BANK OF SCOTLAND GROUP PLC, THE ROYAL BANK OF SCOTLAND PLC, RBS SECURITIES JAPAN LIMITED, BARCLAYS BANK PLC, BARCLAYS PLC, BARCLAYS CAPITAL INC., CITIBANK, NA, CITIGROUP, INC., CITIBANK, JAPAN LTD., CITIGROUP GLOBAL MARKETS JAPAN, INC., COÖPERATIEVE CENTRALE RAIFFEISEN-BOERENLEENBANK B.A., HSBC HOLDINGS PLC, HSBC BANK PLC, LLOYDS BANKING GROUP PLC, HBOS PLC, LLOYDS BANK PLC, ICAP PLC, ICAP EUROPE LIMITED, R.P. MARTIN HOLDINGS LIMITED, MARTIN BROKERS (UK) LTD., TULLETT PREBON PLC, BANK OF AMERICA CORPORATION, BANK OF AMERICA, N.A., MERRILL LYNCH

Docket No.

ECF Case

COMPLAINT

JURY TRIAL DEMANDED

	INCORPORATED, AND JOHN
OE NOS. 1-50,	
	Defendants.
	Defendants.

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Plaintiffs Sonterra Capital Master Fund, Ltd., and Hayman Capital Management, L.P. (collectively, "Plaintiffs") complain, upon knowledge as to themselves and their own acts, and upon information and belief as to all other matters, against Defendants (defined in ¶¶ 54-104), as follows:

INTRODUCTION

- 1. This action arises from Defendants' unlawful combination, agreement, and conspiracy to fix and restrain trade in, and intentional manipulation of Euroyen TIBOR (the Tokyo Interbank Offered Rate), Yen-LIBOR (the London Interbank Offered Rate for the Japanese yen), and the prices of Euroyen-based derivatives (defined in ¶¶ 123-133) during the period of at least January 1, 2006 through at least June 30, 2011 (the "Class Period") in violation of the Sherman Act, 15 U.S.C. § 1, et seq., the Racketeer Influenced and Corrupt Organizations Act, 18 U.S.C. §§ 1961-1968 ("RICO"), and common law.
- 2. Defendants' rigging of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives during the Class Period was intentional, persistent, and knowingly unlawful. Defendants' misconduct, and the far-reaching, harmful impact on financial markets worldwide, is detailed in numerous guilty pleas, government settlements, deferred prosecution agreements, criminal charges, and findings of fact released in connection with investigations and regulatory actions by governmental agencies in the U.S. and abroad.

Guilty Pleas and Government Settlements Involving the Contributor Bank Defendants

3. The breadth and impact of the wrongdoing alleged herein is staggering. As the U.S. Department of Justice ("DOJ") put it in connection with the guilty plea of Defendant Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.'s ("Rabobank") former trader:

This conduct distorted transactions and financial products around the world. Manipulating LIBOR effectively rigs the global financial system, compromising the fairness of world markets.

* * *

This was the ultimate inside job. As alleged, traders illegally influenced the very interest rate on which their trades were based, using fraud to gain an unfair advantage. Takayuki Yagami is the ninth person charged by the Justice Department in connection with the industry-wide LIBOR investigation, and we are determined to pursue other individuals and institutions who engaged in this crime.

- 4. Defendant UBS AG ("UBS") has already self-reported criminal cartel activity to the DOJ pursuant to the Antitrust Criminal Penalty Enhancement and Reform Act ("ACPERA") for its admitted manipulation of Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives.
- 5. Following UBS' footsteps, Defendants UBS Securities Japan Co., Ltd. ("UBS Japan") and RBS Securities Japan Limited ("RBS Japan") have agreed to waive indictment and plead guilty to a one-count criminal information filed in the District of Connecticut by the Criminal Division, Fraud Section, and the Antitrust Division of the DOJ charging each with wire fraud, in violation of 18 U.S.C. § 1343 in connection with their manipulation of Yen-LIBOR and/or Euroyen TIBOR, and the prices of Euroyen-based derivatives. As part of its Deferred Prosecution Agreement with the DOJ, RBS Japan's corporate parent The Royal Bank of Scotland plc ("RBS") was also charged with wire fraud and price-fixing in violation of Section 1 of the Sherman Act in connection with its manipulation of Yen-LIBOR and the prices of Euroyen-based derivatives.
- 6. Defendant Rabobank also waived indictment to wire fraud as part of its own Deferred Prosecution Agreement with the DOJ. Former Rabobank Trader, Takyuki Yagami,

pled guilty to conspiracy to commit wire and bank fraud for his role in the conspiracy to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives.

- 7. Numerous other cartel members, including RBS, Deutsche Bank AG ("Deutsche Bank"), Rabobank, J.P. Morgan Chase & Co. ("JPMorgan"), Citigroup, Inc. ("Citigroup"), Lloyds Banking Group plc ("Lloyds"), Barclays PLC, Barclays Bank PLC, and Barclays Capital Inc. (collectively, "Barclays"), R.P. Martin Holdings Limited ("R.P. Martin"), DB Group Services UK Limited ("DB Group"), and ICAP Europe Limited ("ICAP"), have agreed to historic settlements with regulators, collectively paying (with UBS) over \$7 billion in criminal fines and penalties. The settlements resolve DOJ, U.S. Commodity Futures Trading Commission ("CFTC"), the U.K. Financial Services Authority ("FSA"), 1 and European Commission ("EC") charges relating to restraints of trade and manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives.
- 8. The factual findings that accompanied the UBS, RBS, Rabobank, Barclays and Deutsche Bank's settlements each included a "Statement of Facts" ("SOF") (of which UBS, RBS, Rabobank, Barclays, and Deutsche Bank respectively, admitted as "true and accurate") that are attached to, and incorporated by reference in, various non-prosecution or deferred prosecution agreements entered with the DOJ's Criminal Division, Fraud Section. The admissions by UBS, RBS, Rabobank, and Barclays include, *inter alia*:
- 9. <u>UBS</u>. During the period of at least January 2005 through at least June 2010, UBS orchestrated a sustained, wide-ranging and systematic scheme to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives through (i) their intentional and deliberate false reporting of UBS's own Yen-LIBOR and Euroyen TIBOR submissions; (ii)

¹ On April 1, 2013, the Financial Services Authority changed its name to the Financial Conduct Authority ("FCA").

conspiring with and paying bribes to interdealer brokers (employed by the Broker Defendants) to disseminate false and misleading Euroyen rates; and (iii) colluding directly with other interest rate derivatives traders at other Contributor Bank Defendants to increase the likelihood of a successful manipulation on the prices of Euroyen-based derivatives.

- 10. **RBS**. As part of its Deferred Prosecution Agreement, RBS admitted that it manipulated Yen-LIBOR and the prices of Euroyen-based derivatives from at least 2006 through 2010 through hundreds of instances in which RBS (i) falsely reported its own Yen-LIBOR submissions; and (ii) colluded directly with UBS and interdealer brokers.
- 11. Rabobank. As part of its own Deferred Prosecution Agreement, Rabobank admitted that it manipulated Yen-LIBOR and the prices of Euroyen-based derivatives from May 2006 through November 2010 in order to illegitimately profit on their own Euroyen-based derivatives positions. Rabobank also admitted that from as early as May 2006 and continuing at least through October 2008, Rabobank colluded with a trader at another Yen-LIBOR Contributor Panel bank (identified by Plaintiffs as Defendant Lloyds) and agreed that they would, upon request, manipulate their own Yen-LIBOR submissions to benefit each other's Euroyen-based derivatives positions or the trading positions of other traders.
- 12. <u>Barclays</u>. Barclays admitted that its derivatives traders, from at least as early as August 2006 through approximately June 2007, and also in June 2009, made at least 26 requests to its rate submitters to manipulate Barclays' Yen-LIBOR submissions in a direction that would benefit Barclays' Euroyen-based derivatives positions. Barclays further admitted that certain of its swaps traders colluded with traders at other Contributor Bank Defendants to make Yen-LIBOR false reports, and on occasion accommodated requests for false Yen-LIBOR reports made by other traders, so as to coordinate their manipulative and anticompetitive conduct.

- Deutsche Bank. As part of its Deferred Prosecution Agreement with the DOJ, Deutsche Bank admitted that it manipulated Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives from at least 2006 through 2010. Deutsche Bank also agreed to waive indictment to price-fixing Yen-LIBOR and Euroyen TIBOR. Deutsche Bank admitted that its traders regularly requested false Yen-LIBOR and Euroyen TIBOR submissions and that its Yen-LIBOR and Euroyen TIBOR submitters honored these requests. Deutsche Bank also admitted that from at least 2008, it colluded with former UBS and Citibank Yen Trader, Tom Hayes, to manipulate Yen-LIBOR and Euroyen TIBOR. In addition, Deutsche Bank failed to cooperate with the DOJ's investigation in several respects by slowly producing relevant information, not providing evidence of its coordination with other banks, destroying documents, audio, and data, and hiding the Federal Financial Supervisory Authority for Germany's ("BaFin") LIBOR misconduct findings from the DOJ.
- 14. The UBS, RBS, Rabobank, Barclays, and Deutsche Bank Settlements are also memorialized in "CFTC Orders" and "FSA Final Notices" which include additional factual allegations consistent with the admissions contained in the DOJ statement of facts regarding unlawful acts by Defendants UBS, RBS, Rabobank, Barclays, and Deutsche Bank. *See infra*.
- 15. In December 2013, the EC collectively fined Defendants UBS, RBS, Deutsche Bank, JPMorgan, Citigroup, and R.P. Martin more than \$870 million for participating in "Yen Interest Rate Derivatives cartels" between 2007 and 2010. The EC uncovered seven (7) distinct "infringements" lasting between 1 and 10 months and found that these Defendants colluded to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives.

Government Settlements Involving the Broker Defendants

16. As detailed herein, the Broker Defendants played a critical role in the successful of the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based

derivatives. They acted as the proverbial hub in the conspiratorial wheel in coordinating and directing the submission of false reports and other manipulative conduct between the Contributor Bank Defendants, contributing to the restraint of trade in the Euroyen-based derivatives market.

- 17. To date, Broker Defendants ICAP Europe Limited ("ICAP") and R.P. Martin have reached settlements with the CFTC and FCA agreeing to pay \$87 million (ICAP Europe Limited) and \$2.2 million (R.P. Martin), respectively. Both ICAP and R.P. Martin, with Broker Defendant Tullett Prebon PLC ("Tullett Prebon"), remain under investigation by the U.K. Serious Fraud Office, among other global regulators.
- 18. <u>ICAP</u>. UBS, in particular former UBS Senior Yen Trader Thomas Hayes ("Hayes"), colluded with ICAP Yen brokers and requested their assistance more than 400 times in manipulating Yen-LIBOR during the Class Period. ICAP brokers readily agreed and accommodated those and other manipulative requests by issuing, via a Yen cash broker, group emails to panel banks and others containing "Suggested LIBORs" for Yen-LIBOR. The Suggested LIBORs reflected artificial rates that would financially benefit UBS's and Hayes' Euroyen-based derivatives positions, not an honest and objective assessment of prevailing Yen-LIBOR rates.
- 19. This manipulative strategy was successful as almost all of the Yen-LIBOR Contributor Banks received the Suggested LIBORs, and several improperly relied on them in making their Yen-LIBOR submissions. Recognizing their success in manipulating Yen-LIBOR and Euroyen-based derivatives prices, the ICAP brokers referred to the Contributor Bank Yen-LIBOR submitters as "sheep" when they copied the Yen cash broker's Suggested LIBORS. In fact, the CFTC determined that at least two Contributor Banks' submissions mirrored the Suggested LIBORs up to 90% of the time. This occurred, despite express British Bankers'

Association ("BBA") guidelines that prohibited Contributor Banks from relying on brokers "Suggested LIBORs" when making their Yen-LIBOR submissions.

- 20. ICAP Yen brokers were well compensated for colluding with UBS receiving hundreds of thousands of dollars in bribes and kickbacks for their "LIBOR services."
- R.P. Martin. Like ICAP brokers, R.P. Martin brokers on its Yen desks knowingly disseminated false and misleading information concerning Yen borrowing rates to market participants to manipulate Yen-LIBOR, and the prices of Euroyen-based derivatives.

 R.P. Martin brokers did so primarily to aid and abet former UBS Senior Yen Trader Hayes. The FCA determined that, during the Class Period, UBS made at least 600 manipulative requests to R.P. Martin. R.P. Martin, in turn, provided misleading recommendations to Yen-LIBOR submitters regarding where they should set certain Yen-LIBOR tenors. R.P. Martin also contacted certain Yen-LIBOR submitters directly and asked them to move their submissions in an artificial direction that would benefit UBS's and Hayes' Euroyen-based derivatives positions.

 R.P. Martin brokers also colluded with UBS to publish "spoof" bids, to the Euroyen-based derivatives market, which included Yen-LIBOR submitters, again to manipulate Yen-LIBOR and Euroyen-based derivatives prices for the benefit of UBS and Senior Yen Trader Hayes. In exchange for their unlawful assistance, R.P. Martin brokers accepted bribes and other illicit compensation from UBS and other Contributor Bank Defendants totaling more than \$400,000.

Direct Evidence of Manipulative and Anticompetitive Conduct.

22. Although only a small fraction of Defendants' communications have thus far been made public in connection with the UBS, RBS, Rabobank, ICAP, R.P. Martin, Barclays, and Deutsche Bank settlements, those communications already include what courts have characterized as "rare," "smoking gun," and "direct" evidence of blatant market manipulation

and illicit conspiratorial conduct. Defendants' own words are unencumbered by any concern of market oversight, internal supervision, legal recourse, or the far reaching, negative, and material impact of their misconduct on the prices of Euroyen-based derivatives. Corruption of the Euroyen market became so widespread that in the words of an RBS Senior Yen Trader, the banks setting Yen-LIBOR had become a "cartel."

23. For example, in one communication, a UBS trader and an interdealer broker [employed by Defendant R.P. Martin] congratulated each other on the financial success of Defendants' manipulative conduct: "mate yur getting bloody good at this libor game....think of me whn yur on yur yacht in monaco wont you" (emphasis added). In another communication, traders at RBS bragged: "its just amazing how libor fixing can make you that much money" and that the manipulation was a "good way to boost share price" (emphasis added). Additionally, traders routinely thanked rate submitters for carrying out their instructions to submit false Euroyen rates that benefitted their Euroyen-based derivatives positions, remarking "cheers," "thanks mate," and "thanks for that."

Other Indicia of Unlawful Conduct: Knowledge of Unlawfulness and Conduct to Escape Detection.

24. Defendants continued their pervasive manipulation of Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives long-after authorities launched investigations into false reporting and manipulation of U.S. Dollar LIBOR. For example, RBS traders and submitters acknowledged internally by at least September 2010 that regulators were investigating false reporting of U.S. Dollar LIBOR, but nonetheless agreed to continue manipulating Yen-LIBOR and other interest rates. RBS traders and submitters, however, recognized that they should be more careful to cover their tracks to avoid detection by no longer

discussing in writing their manipulation of Yen-LIBOR, at least while regulators investigated U.S. Dollar LIBOR manipulation.

- 25. For example, in one exchange on November 22, 2010, an RBS Yen Trader and Senior Yen Trader acknowledged that "at the moment the FED are all over us about USD libors" but because they did not "think anyone cares [about] JPY [Yen] libor" at least "not yet," they had the green light to continue manipulating the prices of Euroyen-based derivatives.
- 26. Other instant messages and communications produced in connection with the government settlements evidence that the knowing submission of false Euroyen TIBOR and/or Yen-LIBOR rates to financially benefit Euroyen-based derivatives positions was the norm, while submitting rates reflective of prevailing (true) Euroyen interbank borrowing costs in accordance with Japanese Bankers Association ("JBA") and BBA rules was the exception.

Other Indicia of Unlawful Conduct: The Role of Managers.

- 27. Unlike prior manipulation cases where a rogue trader singularly concocted and orchestrated a manipulation, the manipulation here had the blessing—and in many instances was at the immediate direction—of senior managers of the Contributor Bank and Broker Defendants who were charged with supervising for-profit Euroyen-based derivatives trading at the firm. For example, at Deutsche Bank, management created "Monday Risk Calls" to ensure that its Yen-LIBOR and Euroyen TIBOR traders and submitters were on the same page and would manipulate Yen-LIBOR and Euroyen TIBOR in the most beneficial direction for their Euroyen-based derivatives positions.
- 28. In another example, on December 11, 2007, an unidentified UBS Manager emailed a UBS Senior Manager to see "how much pressure" they could "exert" on UBS's upcoming Yen-LIBOR submissions because UBS had a potential exposure of "2[million/per

basis point]" on the approaching December International Monetary Market ("IMM") date.² To justify the manipulation, UBS Manager "E" stated that since "everyone will be trying to influence the [upcoming Yen-LIBOR] fixing," UBS could lose on its Euroyen-based derivatives positions if UBS did not "do the same." In response, UBS Senior Manager "D" promised he would handle the situation and discuss it with another UBS senior manager. A distressed Manager "E" followed up with Senior Manager "D" three days later, on December 14, 2007, to see if the manipulation had been approved: "How was the discussion... I need some assurance they will put their rate up please... our rate input can make a significant difference."

Other Indicia of Unlawful Conduct: Spoofing the Market and False Euroyen Derivative Price Reports.

29. The Contributor Bank Defendants and Broker Defendants also colluded to manipulate Euroyen-based derivative prices by publishing false Euroyen-based derivatives transactions and by disseminating false Euroyen-based derivative price quotes, including false bid and offer prices, to the Euroyen-based derivatives market. UBS asked Broker Defendants, including ICAP, to display on the Broker Defendants' electronic trading screens prices of non-existent Euroyen-based derivatives transactions with the same tenors as the Yen-LIBOR and Euroyen TIBOR rates for the purpose of manipulating both the prices of Euroyen-based derivatives and Yen-LIBOR and Euroyen TIBOR rates. The Broker Defendants' electronic trading screens were available to Euroyen-based derivatives dealers and traders including many of the Contributor Bank Defendants. UBS also asked Broker Defendants to post and disseminate "spoof" bids and offers for Euroyen-based derivatives with the same tenors as the Yen-LIBOR and Euroyen TIBOR rates for the purpose of manipulating both the prices of Euroyen-based

² IMM dates are standard, quarterly, final settlement dates in March, June, September, and December of each year. Many Euroyen-based derivatives either settle or reset on IMM dates.

derivatives and Yen-LIBOR and Euroyen TIBOR rates. Defendants colluded to disseminate spoof bids and offers through various means including through Broker Defendants' Yen Desk "squawk boxes" and through the Broker Defendants' electronic screens, which allowed UBS and the Broker Defendants to disseminate the "spoof" bids and offers to a multitude of Euroyen-based derivatives traders, including multiple Contributor Bank Defendants.

Direct Evidence of Anticompetitive Conduct.

- 30. The communications made public so far show rampant collusion and agreements to restrain trade in the Euroyen-based derivatives market. The competing banks agreed to "back scratching" arrangements, whereby co-conspirators explicitly agreed to submit artificial Euroyen rates to financially benefit other co-conspirators' Euroyen-based derivatives positions in return for reciprocity sometime in the future.
- 31. The Contributor Bank Defendants, aided and abetted by Broker Defendants, agreed to stagger false reporting of Yen-LIBOR rates over successive trading days (*e.g.*, agreeing that an artificially low rate would be submitted by manipulator A today, by manipulator B tomorrow and manipulator C the next day, etc.) in order to exert greater and longer-lasting manipulative pressure on Euroyen-based derivatives prices and to mask their false reporting. In one such example, an ICAP Broker developed a strategy in July 2009 with former UBS Senior Yen Trader Hayes to artificially lower the six-month Yen-LIBOR. The ICAP Broker cautioned Hayes that, "if you drop your 6m dramatically on the 11th [of August] mate, it will look v[ery] fishy, especially if [Yen Bank J] and [Yen Bank F] go with you[,] I'd be v[ery] careful how you play it... might get people questioning you." UBS Senior Yen Trader Hayes, seasoned in this practice, said, "don't worry will stagger the drops ie 5bp then 5bp...us then [Yen Bank F] then

[Yen Bank J] then us then [Yen Bank F] then [Yen Bank J].³ The ICAP Broker confirmed their agreement to collusively manipulate six-month Yen-LIBOR artificially lower and said, "great the plan is hatched and sounds sensible."

32. There are at hundreds of publicly available instant messages showing collusion between UBS, RBS, Rabobank, ICAP, Deutsche Bank, and R.P. Martin and several of the Contributor Bank Defendants. In one message alone, former UBS Senior Yen Trader Hayes enlisted a broker to solicit 9 of the 16 Contributor Panel banks to join the conspiracy to manipulate Yen-LIBOR. Other messages show that one additional bank (the 10th) agreed to collude with UBS to artificially increase Yen-LIBOR on March 31, 2009.

<u>Defendants' Former Traders and Rate-Submitters Have Been Criminally Charged</u> in this District and Abroad.

- 33. Former RBS, UBS and Citigroup Yen Trader Hayes, along with another UBS Yen Trader, Roger Darin, were charged with conspiracy to commit wire fraud in a criminal complaint unsealed in Manhattan federal court in December 2012. Hayes also faces wire fraud and Sherman Act charges from alleged anticompetitive conduct in relation to Yen-LIBOR from at least September 2006 through September 2009. *See* Ex. A-6.
- 34. The DOJ also charged three former ICAP brokers, Darrell Read, Daniel Wilkinson and Colin Goodman, with conspiracy to commit wire fraud and wire fraud in connection with the manipulation of Yen-LIBOR from at least July 2006 through September 2010. *See* Ex. C-3.
- 35. The DOJ also charged three former Rabobank traders, Paul Robson, Paul Thompson and Tetsuya Motomura with conspiracy to commit wire fraud, conspiracy to commit bank fraud, and wire fraud in connection with the manipulation of Yen-LIBOR from May 2006

³ Yen Bank F is Defendant Deutsche Bank; upon information and belief Yen Bank J is Defendant HSBC.

through early 2011. *See* Ex. D-5. Another former Rabobank Yen derivatives trader, Takayuki Yagami, pled guilty to conspiracy to commit wire fraud and bank fraud for his role in the manipulation of Yen-LIBOR. *See* Ex. D-6.

- 36. In June 2013, the U.K. Serious Fraud Office ("SFO") charged former UBS and Citigroup Senior Yen Trader Hayes with eight counts of conspiracy to defraud and directly implicated Defendants (i) UBS AG; (ii) Citigroup Global Markets Japan Limited, (iii) Deutsche Bank AG, (iv) UBS Japan, (v) JP Morgan Chase & Co., (vi) RBS, (vii) HSBC, and (viii) Rabobank, as well as Broker Defendants (i) ICAP, (ii) R.P. Martin and (iii) Tullett Prebon in the manipulation of Yen-LIBOR and "other interbank offered rates" from August 2006 through December 2010.
- 37. In July 2013, the SFO also charged former R.P. Martin brokers Terry Farr and James Gilmour with conspiracy to defraud from August 2006 through September 2010 in connection with the manipulation of Yen-LIBOR.
- 38. In addition, in March 2014, the SFO charged former ICAP brokers Danny Wilkinson, Darrell Read, and Colin Goodman with conspiracy to defraud charges from August 2006 through September 2010 in connection with the manipulation of Yen-LIBOR.

<u>Disciplinary Proceedings, Terminations, Resignations and Withdrawals from Rate Setting Panels</u>.

39. Both RBS and UBS have since withdrawn from the JBA's Euroyen TIBOR panel. In addition, more than 25 people resigned from UBS following an internal review of the bank's involvement in the alleged manipulation of Euroyen TIBOR and Yen-LIBOR rates. RBS has also terminated four (4) employees, and is reportedly weighing further disciplinary proceedings against additional employees. Barclays Chairman Marcus Agius, and its Chief Executive Officer, Robert E. Diamond, Jr., resigned within days of the announcement of the Barclays

Settlement. In connection with his resignation, Mr. Diamond revealed that at least 14 traders at Barclays were involved in rate setting wrongdoing at the bank. The Chief Executive of Defendant RBS Japan resigned in the wake of the JFSA's administrative sanctions against Defendant RBS Japan.

<u>Public Officials and Other Market Participants Acknowledge The Existence of Cartels and Wide-Spread Collusion in the Euroyen Market.</u>

- 40. The EC fined Defendants UBS, RBS, Deutsche Bank, JP Morgan, Citigroup and R.P. Martin a total of \$870 million for their participation in "Yen Interest Rate Derivatives Cartels." Joaquin Aluminia, Vice-President of the EC, commented "What is shocking about the LIBOR...scandal[] is not only the manipulation of benchmarks, which is being tackled by financial regulators worldwide, but also *the collusion between banks who are supposed to be competing with each other*. Today's decision sends a clear message that the Commission is determined to fight and sanction these cartels in the financial sector. Healthy competition and transparency are crucial for financial markets to work properly, at the service of the real economy rather than the interests of a few." (Emphasis added).
- 41. CFTC Chairman Gary Gensler expressed a similar sentiment, stating that: "Barclays, UBS and RBS were fined \$2.5 billion for manipulative conduct by the CFTC, the UK Financial Services Authority (FSA) and the DOJ. At each bank, the misconduct spanned many years, took place in offices in several cities around the globe, included numerous people sometimes dozens, even included senior management, and involved multiple benchmark rates and currencies. In each case, there was evidence of collusion."
- 42. In February 2013, Eddy Takata, a Tokyo-based Yen money market derivatives trader who worked for Defendants Barclays and Deutsche Bank during the Class Period, published a book entitled THE MANIPULATION OF THE LIBOR FIXING, AND THE DOUBT OVER THE

ARTIFICIAL TIBOR FIXING (HIDETO "EDDY" TAKATA (Gentosha Renaissance, Inc.), February 20, 2013). The former trader alleges the large increase of Euroyen TIBOR over Yen-LIBOR since 2009 was the result of collusion amongst the Euroyen TIBOR rate setting banks so that the banks could borrow Yen-LIBOR at a lower rate and lend at the higher Euroyen TIBOR rate.

43. In May 2014, the *Financial Times* reported "gaps between Tibor rates and rates in actual interbank transactions" revealing that in the first part of 2014, the actual market rate for three-month funds was 0.14% whereas three-month Euroyen TIBOR was significantly higher at 0.215%. The same report also revealed price anomalies in the spread between Yen-LIBOR and Euroyen TIBOR, showing that the average spread was 14 basis points between 2009 and 2012. However, this "gap narrowed sharply in the first three months of 2013" following criminal probes and allegations made by trader Eddy Takata that Japanese banks were conspiring to keep Euroyen TIBOR artificially high.

Evidence Revealed at Hayes' Criminal Trial Confirms Plaintiffs' Allegations

- 44. UBS' Senior Yen Trader Hayes, who at times accounted for roughly 40% of the over-the-counter Euroyen-based derivatives market and has been described as the "ringleader" of Defendants' scheme, was arrested in the U.K. on December 11, 2012, and charged with eight counts of conspiracy to defraud for his involvement in rigging Yen-LIBOR and Euroyen TIBOR.
- 45. Hayes' criminal trial, *R. v. Hayes*, T No. T20137308 ("Hayes Trial") began in the Southwark Crown Court on May 26, 2015. The trial has provided new insight into how Defendants manipulated Yen-LIBOR and Euroyen TIBOR to fix the prices of Euroyen-based derivatives at artificial levels for their benefit, including, *inter alia*, highlights from more than 80 hours of recorded testimony Hayes gave to the SFO, live witnesses from Hayes former employer

Citibank, and hundreds of new communications beyond those released in the Defendants' government settlements.

Tibor on a daily basis, coordinating their false Yen-Libor and/or Euroyen Tibor submissions with dozens of traders, submitters, and inter-dealer brokers. By working together, Defendants rigged the market for Euroyen-based derivatives for long periods of time, including during at least seven long-term "campaigns," demonstrating that prices were artificial throughout the Class Period. The pervasive and persistent nature of Defendants' Yen-Libor and Euroyen Tibor manipulation extended beyond their trading desks to company management, who not only knew that the prices of Euroyen-based derivatives were being manipulated for their benefit, but encouraged that practice.

JURISDICTION AND VENUE

- Antitrust Act, 15 U.S.C. § 1, Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26(a), Section 1964 of RICO, 18 U.S.C. § 1964, and 28 U.S.C. §§ 1331 and 1337, respectively. This Court also has jurisdiction over the state law claims under 28 U.S.C. § 1367 because those claims are so related to the federal claim that they form part of the same case or controversy, and under 28 U.S.C. § 1332 because the amount in controversy for the Class exceeds \$5,000,000 and there are members of the Class who are citizens of a different state than Defendants.
- 48. Venue is proper in the Southern District of New York, pursuant to, among other statutes, Sections 4, 12 and 16 of the Clayton Act, 15 U.S.C. §§ 15, 22 and 26, Section 1965 of RICO, 18 U.S.C. § 1965, and 28 U.S.C. §1391(b), (c) and (d). One or more of the Defendants

resided, transacted business, were found, or had agents in the District, and a part of the events or omissions giving rise to the claims occurred in the Southern District of New York.

- 49. Each Defendant is subject to personal jurisdiction because it transacted business throughout the United States, including in this District, by transacting in Euroyen-based derivatives, benchmarked and/or settled based on Euroyen TIBOR and/or Yen-LIBOR within the United States and with U.S. counterparties. Defendants The Bank of Tokyo-Mitsubishi UFJ, Ltd, The Sumitomo Trust and Banking Co., Ltd. (now known as Sumitomo Mitsui Trust Bank, Ltd.), The Norinchukin Bank, Mitsubishi UFJ Trust and Banking Corporation, Sumitomo Mitsui Banking Corporation, Deutsche Bank AG, The Shoko Chukin Bank, Ltd., Mizuho Bank, Ltd., Société Générale SA, Barclays Bank plc, Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A., Lloyds Bank plc, Shinkin Central Bank, The Bank of Yokohama, Ltd., and The Royal Bank of Scotland plc, have consented to the personal jurisdiction of the United States Courts by registering their New York City branch or representative offices with the New York State Department of Financial Services ("NYSDFS") under New York Banking Law §§ 200 and 200b. Defendants RBS and UBS consented to personal jurisdiction in the United States by registering with the Connecticut Department of Banking under Section 36a-428g of the Connecticut General Statutes.
- 50. Defendants, directly and indirectly, singly and in concert, made use of the means and instrumentalities of transportation or communication in, or the instrumentalities of, interstate and/or international commerce, or of the mails in connection with the unlawful acts and practices and courses of business alleged in this Complaint.

⁴ See Aldo Vera v. Republic of Cuba, No. 12 Civ. 1596, 2015 U.S. Dist. LEXIS 32846 (S.D.N.Y. Mar. 17, 2015).

51. Defendants' restraint of trade and manipulation of Euroyen TIBOR, Yen-LIBOR, and the prices of Euroyen-based derivatives had direct, substantial, and reasonably foreseeable effects in the U.S., and on Plaintiffs and members of the Class. Euroyen-based derivatives are actively traded in the United States and by U.S.-based counterparties. Defendants, as sophisticated market participants, knew or should have known, that the Euroyen TIBOR and Yen-LIBOR rates published and compiled by and on behalf of the JBA and BBA, respectively, are disseminated in the U.S. through electronic means, and are used to price, settle, and benchmark Euroyen-based derivatives traded in the U.S. and by U.S. investors. For these reasons, Defendants knew or should have known, that the misreporting of Euroyen TIBOR and Yen-LIBOR rates to the JBA and BBA, respectively, as well as Defendants' other manipulative and collusive conduct would, and did, have direct, substantial and reasonably foreseeable effects in the United States, including on the prices of Euroyen-based derivatives transacted domestically.

PARTIES

- 52. Plaintiff Sonterra Capital Master Fund, Ltd. ("Sonterra") is an investment fund with its principal place of business in New York. Sonterra engaged in U.S.-based transactions for Euroyen-based derivatives, including Yen foreign exchange forwards, during the Class Period at artificial prices proximately caused by Defendants' unlawful manipulation and restraint of trade as alleged herein. As a consequence of Defendants' manipulative conduct, Sonterra was damaged and suffered legal injury. See ¶¶ 690-692 infra.
- 53. Plaintiff Hayman Capital Management L.P., an investment advisor with its principal place of business in Dallas, Texas, brings claims on behalf of the investment funds it advises (collectively "Hayman"). Hayman engaged in U.S.-based transactions for Euroyen-

based derivatives, including Yen-LIBOR-based interest rate swaps and Yen-LIBOR-based "swaptions," *i.e.*, options on Yen-LIBOR-based interest rate swaps, directly with Defendants Barclays, Merrill Lynch, JPMorgan, and Deutsche Bank during the Class Period. Because these Euroyen-based derivatives are directly priced, benchmarked, and settled based on Yen-LIBOR, Hayman transacted at artificial prices that were directly and proximately caused by Defendants' efforts to rig Yen-LIBOR and Euroyen TIBOR for their financial benefit. As a result, Hayman was damaged and suffered legal injury. *See* ¶¶ 693-701 *infra*.

- 54. Defendant Mizuho Bank, Ltd. ("Mizuho Bank") is a subsidiary of Mizuho Financial Group, a Japanese financial institution headquartered in Tokyo, Japan. During the Class Period, Mizuho Bank was a reference bank for the JBA's Euroyen TIBOR panel.
- a. In April 2005, Mizuho Bank entered into a business collaboration with The Bank of New York in the area of distribution of investment trust products in Japan. It also entered into separate business collaborations with Wachovia Bank and Wells Fargo Bank respectively. Moreover, Mizuho Bank's process agent, Mizuho Corporate Bank, Ltd. ("Mizuho Corporate Bank"), New York Branch, is a New York resident, and the businesses conducted by Mizuho Bank and Mizuho Corporate Bank are indistinguishable. On July 1, 2013, Mizuho Bank and Mizuho Corporate Bank formally merged into one bank. Their collective businesses include (i) deposits, bank debentures, lending (including non-recourse loans and commitment facilities), (ii) foreign exchange, (iii) derivatives, (iv) payment and settlement services (bill/check clearing, payment and others), (v) e-solution business (firm banking, CMS, debit cards), (vi) corporate bond trustee services, investment trust, defined contribution pension business, (vii) treasury, and (viii) syndicated loans.

- 55. Defendant Mizuho Corporate Bank is a subsidiary of Mizuho Financial Group and is headquartered in Tokyo, Japan. During the Class Period, Mizuho Corporate Bank was a reference bank for the JBA's Euroyen TIBOR panel and a reference bank for the BBA's Yen-LIBOR panel. Mizuho Corporate Bank's New York branch is located in this District at 1251 Avenue of the Americas, New York, NY 10020.
- 56. Mizuho Trust & Banking Co., Ltd. ("Mizuho Trust") is a subsidiary of Mizuho Financial Group. During the Class Period, Mizuho Trust was a reference bank for the JBA's Euroyen TIBOR panel. Mizuho Trust, through its wholly owned subsidiary, Mizuho Trust and Banking Co., Ltd. (USA) ("Mizuho Trust USA"), operates a New York branch. Mizuho Trust USA is registered with NYDFS to operate as a bank and trust company in this jurisdiction. Mizuho Trust served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Mizuho Trust provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets, creating an extended trading day for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation. As of 2012, Mizuho Trust USA's New York branch held more than \$758 million in assets and had 114 full-time or equivalent employees. Mizuho Trust USA is also an active participant in the foreign exchange market, holding \$199.9 million in foreign exchange rate contracts or commitments to purchase foreign currencies.
- 57. Defendant The Sumitomo Trust and Banking Co., Ltd. (now known as Sumitomo Mitsui Trust Bank, Ltd.) ("Sumitomo Trust") is a Japanese trust bank and a member of the Sumitomo Mitsui Trust Group headquartered in Tokyo, Japan. During the Class Period, Sumitomo Trust was a reference bank for the JBA's Euroyen TIBOR panel. In December 2011, Sumitomo Trust acquired (and is the successor-in-interest) to Chuo Mitsui Trust & Banking Co.

Ltd. ("Chuo Mitsui"). During the Class Period, Chuo Mitsui was a reference bank for the JBA's Euroven TIBOR panel and maintained a representative office located in this District at 655 3rd Avenue, New York, NY 10017. Sumitomo Trust maintains a foreign branch office in this District located at 527 Madison Avenue, New York, NY 10022. Sumitomo Trust is registered with NYDFS to operate as a foreign banking branch in this jurisdiction under N.Y. Banking Law § 200. Sumitomo Trust is required to submit a "Resolution Plan" to the Board of Governors of the Federal Reserve System under the final regulations implementing Section 165(d) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). In its Resolution Plan, Sumitomo Trust designated its New York branch as a material entity. Its activities include wholesale lending consisting of bilateral and syndicate loans, and securities investments. Its wholesale lending activities are targeted to primarily U.S.-based borrowers and some internationally-based borrowers. Sumitomo Trust is a member of certain payment, clearing and settlement systems, including CLS Bank Internation, FedAdvantage, Fedwire, and Swift Alliance. Sumitomo Trust served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Sumitomo Trust provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets, creating an extended trading day for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation.

58. Defendant The Norinchukin Bank ("Norinchukin") is a Japanese cooperative bank headquartered in Tokyo, Japan. During the Class Period, Norinchukin was a reference bank for the JBA's Euroyen TIBOR panel and a reference bank for the BBA's Yen-LIBOR panel. The New York branch of Norinchukin is located at 245 Park Avenue, 21st Floor, New York, NY 10167. Norinchukin is registered with NYDFS to operate as a foreign banking branch

in this jurisdiction under N.Y. Banking Law § 200. Norinchukin is required to submit a "Resolution Plan" to the Board of Governors of the Federal Reserve System under the final regulations implementing Section 165(d) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). In its Resolution Plan, Norinchukin designated its New York branch as a material entity. Its activities include short-term U.S. dollar funding in support of its securities investment activities and foreign currency funding transactions. Nonchukin is a member of certain payment, clearing and settlement systems including the Fedwire Funds Service and the Fixed Income Clearing Corporation. Nonchukin holds a controlling interest in a broker-dealer subsidiary, Grosvenor Securities LLC, in Chicago, Illinois, and a commercial leasing business in New York, New York, known as JA Mitsui Leasing Capital Corp. It also maintains the The Norinchukin Foundation, a New York domestic 501(c)(3) not-for-profit corporation operating a charitable foundation in the greater New York area. The foundation was established in 1994 to commemorate the tenth anniversary of Norinchukin's New York branch.

59. Defendant The Bank of Tokyo-Mitsubishi UFJ, Ltd. ("Bank of Tokyo-Mitsubishi") is a subsidiary and the banking unit of Mitsubishi UFJ Financial Group, Inc. and is headquartered in Tokyo, Japan. During the Class Period, Bank of Tokyo-Mitsubishi was a reference bank for the JBA's Euroyen TIBOR panel and a reference bank for the BBA's Yen-LIBOR panel. Bank of Tokyo-Mitsubishi's New York branch is located in this District at 1251 Avenue of the Americas, New York, NY 10020. Bank of Tokyo-Mitsubishi is registered with NYDFS to operate as a foreign banking branch in this jurisdiction under N.Y. Banking Law § 200. Bank of Tokyo-Mitsubishi served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Bank of Tokyo-Mitsubishi provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone

markets, creating an extended trading day for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation. One of Bank of Tokyo-Mitsubishi's former derivatives traders, Paul Robson, pled guilty for his involvement in LIBOR manipulation while at Rabobank. Another derivatives trader, Christian Schluep, was suspended by Bank of Tokyo-Mitsubishi for his alleged involvement in LIBOR manipulation. Bank of Tokyo-Mitsubishi parent, Mitsubishi UFJ Financial Group, Inc. ("MUFJ") was required to submit a "Resolution Plan" to the Board of Governors of the Federal Reserve System under the final regulations implementing Section 165(d) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). In its Resolution Plan, MUFJ designated Bank of Tokyo-Mitsubishi's New York branch as a material entity. The New York branch is engaged in corporate and banking services and raises funds in the New York financial market to support Bank of Tokyo-Mitsubishi's global funding needs. The New York branch provides foreign exchange and derivatives services including market risk control/hedging income management and liquidity risk controls. The New York branch is a member of several payment, clearing and settlement systems, including the CME, the "Continuous Linked Settlement Bank International," and the NYSE Euronext London International Futures and Options Exchange.

60. Defendant Mitsubishi UFJ Trust and Banking Corporation ("Mitsubishi UFJ Trust") is a core operating company of Mitsubishi UFJ Financial Group (MUFG) and is headquartered in Tokyo, Japan. During the Class Period, Mitsubishi UFJ Trust was a reference bank for the JBA's Euroyen TIBOR panel. Mitsubishi UFJ Trust's New York branch is a New York resident located in this District at 520 Madison Avenue, 25th Floor, New York, NY 10022. Mitsubishi UFJ Trust is registered with NYDFS to operate as a foreign banking branch in this jurisdiction under N.Y. Banking Law § 200. Mitsubishi UFJ Trust served as a TFX trading and

clearing member during the Class Period. As a TFX trading and clearing member, Mitsubishi UFJ Trust provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets, creating an extended trading day for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation.

Defendant Sumitomo Mitsui Banking Corporation ("Sumitomo Mitsui") is a 61. subsidiary of Sumitomo Mitsui Financial Group, Inc. and is headquartered in Tokyo, Japan. During the Class Period, Sumitomo Mitsui was a reference bank for the JBA's Euroyen TIBOR panel and a reference bank for the BBA's Yen-LIBOR panel. Sumitomo Mitsui's New York branch is located in this District at 277 Park Avenue, New York, NY 10172. Sumitomo Mitsui is registered with NYDFS to operate as a foreign banking branch in this jurisdiction under N.Y. Banking Law § 200. Sumitomo Mitsui served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Sumitomo Mitsui provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets, creating an extended trading day for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation. Sumitomo Mitsui is required to submit a "Resolution Plan" to the Board of Governors of the Federal Reserve System under the final regulations implementing Section 165(d) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). In its Resolution Plan, Sumitomo Mitsui has designated its New York branch as a material entity. The New York branch is engaged in corporate banking and treasury activities, including providing foreign exchange services. The New York branch houses its Trading Department, which focuses on sales and trading of foreign exchange products and derivatives. The New York branch is also a member of numerous payment, clearing and settlement systems.

- 62. Defendant Resona Bank, Ltd. ("Resona") is a Japanese commercial bank and a member of Resona Holdings, Inc., a Japanese financial services group headquartered in Tokyo, Japan. Resona Bank was a reference bank for the JBA's Euroyen TIBOR panel during the Class Period. Resona served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Resona provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets, creating an extended trading day for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation.
- 63. Defendant J.P. Morgan Chase & Co. ("JPMorgan") is a Delaware financial holding company headquartered in New York, New York. During the Class Period, JPMorgan Chase NA was a reference bank for the BBA's Yen-LIBOR panel. JPMorgan entered into swap transactions priced, benchmarked and/or settled based on Euroyen TIBOR and/or Yen-LIBOR with U.S. counterparties, including Plaintiff.
- 64. Defendant JPMorgan Chase Bank, N.A. ("JPMorgan Chase NA") is a federally chartered national banking association headquartered in New York, New York and a wholly owned subsidiary of Defendant JPMorgan Chase. During the Class Period, JPMorgan Chase NA was a reference bank for the JBA's Euroyen TIBOR panel. JPMorgan Chase NA entered into swap transactions priced, benchmarked and/or settled based on Euroyen TIBOR and/or Yen-LIBOR with U.S. counterparties, including Plaintiff Hayman.
- 65. Defendant J.P. Morgan Securities plc, (formerly J.P. Morgan Securities Ltd.) is a wholly owned subsidiary of JPMorgan Chase.
- 66. Defendant Deutsche Bank AG ("Deutsche Bank" or "Deutsche") is a German financial services company headquartered in Frankfurt, Germany. During the Class Period,

Deutsche Bank was a reference bank for the JBA's Euroyen TIBOR panel and a reference bank for the BBA's Yen-LIBOR panel. The New York branch of Deutsche Bank is located in this District at 60 Wall Street, New York, NY 10005. Deutsche Bank is registered with NYDFS to operate as a foreign banking branch in this jurisdiction under N.Y. Banking Law § 200. Deutsche Bank entered into swap transactions priced, benchmarked and/or settled based on Euroyen TIBOR and/or Yen-LIBOR with U.S. counterparties, including Plaintiff Hayman. Deutsche Bank's shares are listed on the New York Stock Exchange. Deutsche Bank first opened a New York branch in the late 1970s and in 1999 acquired Bankers Trust Corporation, a New York domestic business corporation. Deutsche Bank is one of the largest foreign-based employees in New York, and employs 11,000 employees in 28 states in the U.S. Deutsche Bank is required to submit a "Resolution Plan" to the Board of Governors of the Federal Reserve System under the final regulations implementing Section 165(d) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). In its Resolution Plan, Deutsche Bank has designated its New York branch as a material entity. Deutsche Bank's New York branch is engaged in trading activities with respect to derivatives (including interest rate-related derivatives) and cash financial products. Deutsche Bank is also a provisionally registered swap dealer. Defendant DB Group Services (UK) Limited ("DB Group Services") is a wholly-owned subsidiary of Defendant Deutsche Bank. DB Group Services is incorporated and has its principal place of business in the United Kingdom. DB Group Services settled with the DOJ, admitting that it employed many of Deutsche Bank's London-based pool and MMD traders that were responsible for manipulating the LIBOR benchmarks, including Yen-LIBOR.⁵ DB Group

⁵ DB Group DOJ Statement of Facts at 8.

Services also pled guilty to felony wire fraud in the District of Connecticut for its role in manipulating Yen-LIBOR and Euroyen TIBOR.⁶

Defendant The Shoko Chukin Bank, Ltd. ("Shoko Chukin") is joint-stock 67. company headquartered in Tokyo, Japan. Shoko Chukin was a reference bank for the JBA's Euroyen TIBOR panel during the Class Period. Shoko Chukin maintains a New York branch office in this District at 666 Fifth Avenue, 14th Floor, New York, NY 10103. Shoko Chukin is registered with NYDFS to operate as a foreign banking branch in this jurisdiction under N.Y. Banking Law § 200. Shoko Chukin served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Shoko Chukin provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets, creating an extended trading day for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation. Shoko Chukin is required to submit a "Resolution Plan" to the Board of Governors of the Federal Reserve System under the final regulations implementing Section 165(d) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). In its Resolution Plan, Shoko Chukin has designated its New York branch as a material entity. The New York branch facilitates foreign business activities for Japan-based clients in the United States, providing access to U.S. financial markets. The New York branch also provides Shoko Chukin with membership in a number of material payment, clearing and settlement systems. Shoko Chukin's business activities including engaging in derivative transactions such as interest rate and currency swaps to hedge interest rate and foreign exchange fluctuation risk for securities, bonds, borrowings and foreign currency loans.

⁶ See United States v. DB Group Services UK Ltd., Plea Agreement, No. 15-cr-62, ECF No. 4.

- 68. Defendant Shinkin Central Bank ("Shinkin") is a Japan-based financial institution headquartered in Tokyo, Japan. Shinkin was a reference bank for the JBA's Euroyen TIBOR panel during the Class Period. Shinkin has a representative office located in this District at 655 Third Avenue, New York, NY 10017. Shinkin is registered with NYDFS to operate as a foreign representative office in this jurisdiction under N.Y. Banking Law § 200. Shinkin served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, Shinkin provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets, creating an extended trading day for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation. Shinkin's New York branch is one of its overseas bases, and is the U.S. base for the Shinkin Bank industry, and specifically highlight its access to the New York financial market as an advantage. The New York representative office provides assistance in human resource development and other support services to Shinkin banks in the U.S. market.
- 69. Defendant UBS AG ("UBS") is a Swiss banking and financial services company headquartered in Zurich and Basel, Switzerland. During the Class Period, UBS was a reference bank for the JBA's Euroyen TIBOR panel and a reference bank for the BBA's Yen-LIBOR panel. UBS has branch offices in New York and in Connecticut. Its Connecticut branch office registered with the Connecticut Department of Banking to operate as a foreign banking branch in under Conn. Gen. Stat. § 36a-428g. UBS' shares were listed on the New York Stock Exchange until January 17, 2015, and the shares of its corporate parent, UBS Group AG, began trading on the New York Stock Exchange as of November 28, 2014. One of UBS' worldwide principal offices and U.S. Headquarters is located in this District at 1285 Avenue of the Americas, New York, NY 10019. UBS is required to submit a "Resolution Plan" to the Board of Governors of

the Federal Reserve System under the final regulations implementing Section 165(d) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). In its Resolution Plan, UBS has designated its New York and Stamford, Connecticut branches as material entities. The Stamford branch is the center of operations for UBS' Treasury function and payment operations in the US; the primary booking center for the UBS Investment Bank's foreign exchange business with U.S. clients and U.S. corporate lending business; and it houses support functions (e.g. Legal, Compliance & Operational Risk Control, Credit, Finance, Tax, COO, Operations) for the businesses conducted through the U.S. branches and subsidiaries. The New York branch houses UBS' U.S. retail activities of its Wealth Management Americas ("WMA") division, and provides investment management and custody service to WMA clients.

70. Defendant UBS Securities Japan Co. Ltd. is the successor company to UBS Securities Japan, Ltd., (collectively, "UBS Japan") and is a wholly-owned subsidiary of UBS that engages in investment banking and broker-dealer operations. In a Plea Agreement with the U.S. Department of Justice Fraud Section, Defendant UBS Japan agreed to waive indictment and plead guilty to a one-count criminal information in the District of Connecticut charging UBS Japan with wire fraud. As part of its Plea Agreement, UBS Japan admitted that "a meaningful portion of the total value of the transactions entered into by [its] most successful Yen derivatives trader from 2007 through 2009 involved U.S.-based counterparties." UBS Japan also admitted that it "entered into interest rate derivatives transactions tied to LIBOR and Euroyen TIBOR – such as derivatives, forward rate agreements, and futures – with counterparties to those transactions. Many of those counterparties were located in the United States. Those United States counterparties included, among others, asset management corporations, mortgage and loan corporations, and insurance companies. Those counterparties also included banks and other

financial institutions in the United States or located abroad with branches in the United States." As part of the DOJ's criminal complaint against former UBS Japan, the DOJ alleged and UBS Japan admitted that the following overt acts, among others, were committed in the Southern District of New York: (a) on or about September 12, 2007 and on or about July 15, 2008, Senior Yen Trader Thomas Hayes entered into trades with a counterparty based in Purchase, New York; (b) at various time relevant to the DOJ complaint, including on or about March 29, 2007 and on or about April 28, 2008, former UBS and UBS Japan Yen Trader Roger Darin engaged in electronic chats with Hayes; and (iii) at various times relevant to the DOJ complaint, Hayes and Darin, and others known and unknown, caused the manipulation of Yen-LIBOR and Euroyen TIBOR submissions by UBS and other banks to Thomson Reuters, and caused the publication of manipulated Yen-LIBOR and Euroyen TIBOR in New York, New York. Further, Hayes caused confirmations on or about September 12, 2007 and on or about July 15, 2008, to be transmitted from outside the U.S. to a counterparty based in Purchase, N.Y., for transactions involving interest rate derivative products tied Yen-LIBOR which Hayes was secretly manipulating.

71. Defendant The Bank of Yokohama, Ltd. ("The Bank of Yokohama") is a regional bank based in Yokohama City, Kanagawa Japan. During the Class Period, The Bank of Yokohama was a reference bank for the JBA's Euroyen TIBOR panel. The Bank of Yokohama has a representative office located in this District at 780 Third Ave, 32nd Floor, New York, NY 10017. The Bank of Yokohama is registered with NYDFS to operate as a foreign representative office in this jurisdiction under N.Y. Banking Law § 200. The Bank of Yokohama served as a TFX trading and clearing member during the Class Period. As a TFX trading and clearing member, the Bank of Yokohama provided U.S.-based customers access to three-month Euroyen futures contracts in European and American time-zone markets, creating an extended trading day

for U.S. customers trading in yen-denominated swaps, forward rate agreements, hedging or speculation.

- 72. Defendant Société Générale SA ("Société Générale") is a financial services company headquartered in Paris. Société Générale engages in "significant U.S. activities" in several core business areas—including corporate and investment banking, which includes financial and commodities futures brokerage services. Société Générale maintains offices in this District, including at 1221 Avenue of the Americas, New York, New York 10020 and 245 Park Avenue, New York, NY 10167. Société Générale was a reference bank for the BBA's Yen-LIBOR panel during the Class Period.
- 73. Société Générale is licensed, supervised, and regulated as a foreign branch with the NYSDFS. Société Générale is also a registered swap dealer with the CFTC, a swap firm and guaranteed introducing broker with the National Futures Association ("NFA"), and an OTC clearing firm with the CME Group. In Société Générale's 2014 U.S. Resolution Plan, it stated that its core business within the United States is Global Banking and Investor Solutions, as well as declaring its New York Branch as a "material entity." In 1938, Société Générale opened its first U.S. offices and now employs 1,800 corporate professionals in seven U.S. cities.
- 74. Defendant The Royal Bank of Scotland Group plc is a British banking and financial services company headquartered in the United Kingdom with operations in approximately forty countries and territories, including the United States. Defendant Royal Bank of Scotland plc is a wholly owned subsidiary of The Royal Bank of Scotland Group plc (collectively, "RBS"). RBS operates its U.S. headquarters from 600 Washington Blvd.,

⁷Discover Societe Generale in the U.S., SOCIETE GENERALE, available at https://careers.societegenerale.com/locations/usa/discover-societe-generale-in-the-us.

⁸ 2014 U.S. Resolution Plan Société Générale (Dec. 22, 2014).

Stamford, CT 06901. RBS also maintains a branch in this District at 340 Madison Avenue, New York, NY 10173. During the Class Period, RBS was a reference bank for the JBA's Euroyen TIBOR panel and was a reference bank for the BBA's Yen-LIBOR panel.

- 75. RBS is licensed, supervised, and regulated as a foreign branch with the NYSDFS and the Connecticut Department of Banking ("DOB"). RBS is also a registered swap dealer with the CFTC, a Clearing Firm on several of the CME Group's Exchanges, including the CME, NYMEX, CBOT, and COMEX, and licensed and supervised by the Board of Governors of the Federal Reserve System. As of June 30, 2010, RBS was ranked among the fourteen largest broker/dealers of interest-rate derivatives. According to RBS' 2013 U.S. Resolution Plan, RBS made 20% of its income for the 2012 year in the United States.
- According to the FSA, RBS' Yen LIBOR-related misconduct was "widespread" and involved at least twenty-one derivatives traders and LIBOR submitters located in London, Tokyo, and the United States. RBS withdrew from the JBA's Euroyen TIBOR panel in or around June 2012. RBS employed money market traders and derivatives traders throughout the world, including in New York, London, and Tokyo, who traded financial instruments tied to Yen-LIBOR. RBS' U.S.-based dealers trade in the over-the-counter foreign exchange and interest rate derivatives markets, which includes interest rate swaps, forward rate agreements, foreign exchange swaps, and currency swaps. RBS transacted in Euroyen-based derivatives with U.S.-based counterparties during the Class Period.
- 77. Defendant RBS Securities Japan Limited ("RBS Japan") is a wholly-owned subsidiary of RBS that functions as a broker-dealer in addition to having market operations. It

⁹ See Ex. B-5 at 11 ¶48.

¹⁰ See Federal Reserve Bank of New York 2007 Survey at 12, 16-17 (RBS participated in the survey by submitting data on its U.S.-based transactions in Yen LIBOR-based derivatives).

has an office in Tokyo. As part of its Plea Agreement with the Fraud Section of the Criminal Division and Antitrust Division of the DOJ, Defendant RBS Japan admitted as true and accurate that "the market for derivatives and other financial products linked to Yen LIBOR is global and is one of the largest and most active markets for such products in the world. A number of these products are traded in the United States – such as Yen-based swaps contracts traded over the counter – in transactions involving U.S.-based counterparties. For example, more than 15% of the total notional value of the transactions entered into by RBS's Yen derivatives traders from 2006 through 2010 involved U.S.-based counterparties often acting through their overseas offices."

- 78. Defendant Barclays Bank PLC is a U.K. public limited company headquartered in London. Barclays Bank PLC maintains an office in this District at 745 Seventh Avenue New York, NY 10019 where it employs derivatives traders that trade financial instruments tied to Yen-LIBOR. Barclays Bank PLC was a reference bank for the BBA's Yen-LIBOR panel during the Class Period. Barclays Bank PLC licensed, supervised, and regulated as a foreign branch with the NYSDFS.
- 79. Defendant Barclays PLC is a global financial services provider engaged in retail banking, investment banking, and investment management services headquartered in London. According to Barclays PLC's 2013 U.S. Resolution Plan, Barclays PLC "has steadily increased its US footprint." Its U.S. business "is critical to the continued growth of the organization and enables Barclays to serve a global client base, diversify income across geographies, access important strategic markets and achieve growth objectives." Barclays PLC identifies its subsidiary, Defendant Barclays Capital Inc. ("BCI"), and Defendant Barclays Bank PLC's New York Branch as "material entities."

- 80. BCI is incorporated in Connecticut and has its headquarters in New York. BCI is a wholly-owned indirect subsidiary of Barclays Bank PLC. BCI is a US registered securities broker-dealer with the Securities and Exchange Commission ("SEC"), a commodity pool operator, a commodity trading advisor registered with the CFTC, as well as a municipal advisor registered with the SEC and the Municipal Securities Rulemaking Board. BCI clears OTC derivatives products in the United States.
- 81. Collectively, Barclays PLC, Barclays Bank PLC, and BCI are referred to as "Barclays." Barclays' core business lines includes Prime Services, which includes futures and over-the-counter clearing. In 2012, Barclays' U.S. income was €7,599 million. Plaintiff Hayman traded Euroyen-based derivatives from within the United States directly with Barclays.
- 82. Defendant Citigroup, Inc. ("Citigroup") is a Delaware corporate with its headquarters in New York. Defendant Citibank, N.A. ("Citibank") is a federally chartered national banking association headquartered in New York and a wholly owned subsidiary of Defendant Citigroup Inc. Citibank was a reference bank for the BBA's Yen-LIBOR panel during the Class Period.
- 83. Defendant Citibank, Japan Ltd. ("Citibank Japan") is a Japanese commercial bank headquartered in Tokyo and a wholly-owned subsidiary of Defendant Citigroup Inc. Citibank Japan was a reference bank for the JBA's Euroyen TIBOR panel during the Class Period.
- 84. Defendant Citigroup Global Markets Japan Inc. ("Citigroup Global Markets") is a Japanese wholesale investment bank headquartered in Tokyo. Citigroup Global Markets is a wholly-owned subsidiary of Defendant Citigroup, Inc. and an affiliate of Citibank Japan.

 Defendant Citigroup Inc. ("Citigroup"), which controlled Defendants Citibank, N.A., Citibank,

Japan Ltd., and Citigroup Global Markets Japan Inc., reaped significant financial benefit from, and actively participated in, the unlawful conduct alleged herein.

- 85. Defendant Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A. ("Rabobank") is a financial services corporation with headquarters located in Utrecht, the Netherlands. Rabobank is structured as a cooperative. Rabobank "Member Banks" are independent cooperatives that are members of a centralized entity called Rabobank Nederland (in the Netherlands) and Rabobank International (outside of the Netherlands) (collectively, "Rabobank"). In addition to supporting the Rabobank Member Banks, Rabobank operates its own banking business and conducts other activities such as supervising the Rabobank Member Banks on behalf of financial regulators. Rabobank has banking divisions and branches around the world, including in the United States, with its United States branch headquartered in New York. The New York branch of Rabobank Nederland is located in this District at 245 Park Avenue, 37th Floor, New York, NY 10167. Rabobank employs derivatives traders throughout the world - including in New York, London, Utrecht, Tokyo, Hong Kong, and Singapore - who trade financial instruments tied to Yen-LIBOR, including interest rate swaps. Rabobank was a reference bank for the BBA's Yen-LIBOR panel during the Class Period. Rabobank withdrew from the BBA's Yen-LIBOR panel in mid-2012.
- 86. In its 2014 U.S. Resolution Plan, Rabobank declared its New York Branch, Rabobank Nederland, as its only "material entity" within the United States. Rabobank Nederland is licensed, supervised, and regulated as a foreign branch with the NYSDFS, the Federal Reserve Bank of New York, the SEC, the Office of the Comptroller of the Currency, the CFTC, and the Consumer Financial Protection Bureau. Rabobank also stated that it trades

derivative financial instruments, including currency and interest rate swaps and currency and interest rate options over-the-counter with its clients.

- 87. Defendant HSBC Holdings plc is a United Kingdom public limited company headquartered in London that offers banking products and financial services, including personal, business, and institutional banking. Defendant HSBC Bank plc is a United Kingdom public limited company headquartered in London and a wholly owned subsidiary of HSBC Holdings plc (collectively, "HSBC"). HSBC was a reference bank for the BBA's Yen-LIBOR panel during the Class Period. HSBC is listed on the New York Stock Exchange and is a provisionally registered swap dealer with the CFTC.
- 88. Defendant Lloyds Banking Group plc, formerly known as Lloyds TSB Group, is a United Kingdom public limited company headquartered in London. Lloyds Banking Group plc was formed in 2009 when Lloyds TSB Bank plc, now known as Defendant Lloyds Bank plc, acquired Defendant HBOS plc ("HBOS"), a United Kingdom banking and insurance company headquartered in Edinburgh, Scotland. Lloyds Bank plc is located in this District at 1095 Avenue of the Americas, New York, NY 10036. Collectively, these Defendants are referred to as "Lloyds." During the Class Period, Lloyds was a reference bank for the BBA's Yen-LIBOR panel.
- 89. Lloyds is licensed, supervised, and regulated as a foreign branch with the NYSDFS. In its 2014 U.S. Resolution Plan, Lloyds listed the Lloyds Bank plc New York Branch as a "material entity" and as "the primary operating entity for" its U.S. operations. Lloyds generates on average £9.6 billion per year from its U.S. operations. In 2014, Lloyds employed approximately 326 full-time employees in the United States, with 306 of those employees based in New York.

- 90. Defendant Bank of America Corporation is incorporated in Delaware and headquartered at 100 North Tryon Street, Charlotte, North Carolina 28255. Bank of America Corporation is a multinational banking and financial services corporation with its investment banking division located in this District at Bank of America Tower, One Bryant Park, 1111 Avenue of the Americas, New York, New York 10036. Defendant Bank of America, N.A. is a federally-charted national banking association headquartered at 101 South Tyron Street, Charlotte, North Carolina 28255, and is an indirect, wholly-owned subsidiary of Bank of America Corporation.
- 91. Defendant Merrill Lynch International Incorporated ("Merrill Lynch") is an investment and financing company incorporated in Delaware with its principal place of business in New York. Bank of America, N.A. and Merrill Lynch are provisionally registered swap dealers with the CFTC. Plaintiff Hayman traded Euroyen-based derivatives from within the United States directly with Merrill Lynch.
- Euroyen TIBOR Panel. The following Contributor Bank Defendants served on the JBA Euroyen TIBOR panel during the Class Period: (i) The Bank of Tokyo-Mitsubishi UFJ, Ltd.; (ii) Mizuho Bank, Ltd.; (iii) The Sumitomo Trust and Banking Co., Ltd.; (iv) The Norinchukin Bank; (v) Mitsubishi UFJ Trust and Banking Corporation; (vi) Sumitomo Mitsui Banking Corporation; (vii) Resona Bank, Ltd.; (viii) J.P. Morgan Chase Bank, NA; (ix) Mizuho Corporate Bank, Ltd.; (x) Chuo Mitsui Trust & Banking Co. Ltd.; (xi) Deutsche Bank AG; (xii) Mizuho Trust and Banking Co. Ltd.; (xiii) The Shoko Chukin Bank, Ltd.; (xiv) Shinkin Central Bank; (xv) UBS AG; (xvi) The Bank of Yokohama, Ltd.; (xvii) The Royal Bank of Scotland Group PLC.; and (xviii) Citibank, Japan Ltd.

- 93. <u>Yen-LIBOR Panel</u>. The following Contributor Bank Defendants served on the BBA Yen-LIBOR panel during the Class Period: (i) The Bank of Tokyo-Mitsubishi UFJ, Ltd.; (ii) The Norinchukin Bank; (iii) Sumitomo Mitsui Banking Corporation; (iv) J.P. Morgan Chase & Co.; (v) Mizuho Corporate Bank, Ltd.; (vi) Deutsche Bank AG; (vii) UBS AG; (viii) Société Générale; (ix) The Royal Bank of Scotland Group PLC; (x) Barclays Bank PLC; (xi) Citibank, N.A.; (xii) Rabobank; (xiii) HSBC; (xiv) Lloyds; and (xv) Bank of America.
- 94. The following Contributor Bank Defendants served on both the JBA Euroyen TIBOR and BBA Yen-LIBOR panels during the Class Period: (i) The Bank of Tokyo-Mitsubishi UFJ, Ltd.; (ii) The Norinchukin Bank; (iii) Sumitomo Mitsui Banking Corporation; (iv) J.P. Morgan Chase Bank, & Co./J.P. Morgan Chase NA, (v) Mizuho Corporate Bank, Ltd.; (vi) Deutsche Bank AG; (vii) UBS AG; (viii) The Royal Bank of Scotland Group PLC; and (ix) Citibank, NA /Citibank Japan Ltd.
- 95. The defendants that served on the JBA Euroyen TIBOR and/or BBA Yen-LIBOR panels during the Class Period are collectively referred to herein as the "Contributor Bank Defendants."
- 96. Defendant ICAP Europe Limited ("ICAP") is a wholly owned subsidiary of ICAP Group Holdings plc ("ICAP Group"), a wholly owned subsidiary of ICAP plc, and is headquartered in London. ICAP brokers trades for Yen currency within the United States through an electronic broking system that uses centers located in New York.
- 97. ICAP's voice brokerage business, which handles interest rate derivatives and foreign exchange, generated approximately \$792 million in revenue from the Americas during the 2012 fiscal year. ICAP's Yen Brokers, Darrell Read ("Read"), Daniel Wilkinson ("Wilkinson") and Colin Goodman ("Goodman") received requests from UBS and Citigroup

Senior Yen Trader, Tom Hayes ("Hayes"), for assistance in manipulating Yen-LIBOR and Euroyen TIBOR more than 400 times during the Class Period.

- 98. The DOJ charged Read, Wilkinson, and Goodman with committing the following overt acts, among others, in this District: (a) on various dates, including on or about October 24, 2006 and June 25, 2008, former UBS Senior Yen Trader Hayes entered into Yen interest rate derivatives trades brokered by ICAP broker Darrell Read and others with counterparties located in New York, for which trade confirmations were transmitted in interstate and foreign commerce, including to and from New York, on or about the following dates October 24, 2006, November 9, 2006, July 4, 2008, and July 8, 2008; (b) on various dates, including on or about June 7, 2007, on or about February 21, 2008, and on or about July 22, 2009, Read and Wilkinson, former UBS Senior Yen Trader Hayes and others engaged in electronic chats that were routed through a server located in New York; (c) on various dates, including on or about November 20, 2008, and on or about November 21, 2008, Goodman distributed a Yen Run Thru email message that was received by certain individuals through a server located in New York; (d) on various dates, including on or about May 9, 2007, and on or about July 22, 2008, Goodman distributed a Run Thru email message to a colleague located in the U.S.; and (e) at various times during the Class Period, Read, Wilkinson and Goodman and others known and unknown, caused and engaged in conduct that contributed to the publication of manipulated Yen-LIBOR rates in New York.
- 99. ICAP, via Read, Wilkinson, Goodman, and others known and unknown, combined and actively conspired to manipulate Yen-LIBOR. Each day, ICAP published Goodman's Run Thru email messages that included "Suggested LIBORs," ICAP's prediction as to where the published Yen-LIBOR fixing for each tenor would be set for that day. ICAP sent

its Run Thru email messages to almost all of the Yen-LIBOR panel banks, including those banks located in New York and elsewhere in the United States.

- 100. ICAP knew that recipients of its Run Thrus relied and acted upon the information contained therein in making Yen-LIBOR submissions to the BBA. In some cases, the panel member's submissions mirrored the Suggested LIBORs contained in the Run Thrus. Panel members who relied upon the Run Thrus included financial services companies headquartered in New York.
- 101. Defendant R.P. Martin is a U.K.-based market-leading wholesale broking firm.

 R.P. Martin brings together buyers and sellers of fixed income cash flow, bonds, currency and financial derivatives in the international money and capital markets. Defendant Martin Brokers (UK) Ltd. is a wholly owned subsidiary of Martin Brokers Group Ltd., which is a wholly owned subsidiary of R.P. Martin Holdings, and is headquartered in London. R.P. Martin and certain of its subsidiaries, including Martin Brokers (UK) Ltd., are involved in the brokering of cash deposits and derivatives based on Euroyen TIBOR and Yen-LIBOR between banks, including Contributor Bank Defendants. R.P. Martin Holdings Limited and Martin Brokers (UK) Ltd. are collectively referred to herein as "R.P. Martin."
- 102. Defendant Tullett Prebon PLC ("Tullett Prebon") is an interdealer broker headquartered in London. Tullett Prebon facilitates the trading activities of its clients, in particular commercial and investment banks. Tullett Prebon offers a variety of market information services. Tullett Prebon has four U.S. branch offices, including one located in this District at 199 Water Street, New York, NY 10038.

- 103. Defendants ICAP, R.P. Martin, and Tullett Prebon, along with additional yet-unidentified derivative and cash broker defendants, are collectively referred to herein as the "Broker Defendants."
- 104. John Doe Defendants Nos. 1-50 are other entities or persons, including banks, interdealer brokers, cash brokers and other co-conspirators whose identities are currently unknown to Plaintiffs. The John Doe Defendants participated in, furthered, and/or combined, conspired, or agreed with others to perform the unlawful acts alleged herein, including the restraint of trade, fixing, and manipulation of Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen-based derivatives.
- 105. <u>U.S. Market Activity.</u> Defendants Bank of America, Bank of Tokyo-Mitsubishi, Barclays, Citigroup, Deutsche Bank, Mizuho, HSBC, JP Morgan, RBS, Société Générale, Sumitomo Mitsui, and UBS engaged in foreign exchange and interest rate derivatives transactions from within the United States throughout the Class Period. ¹¹ Every three years, the Federal Reserve Bank of New York conducts a survey of the over-the-counter interest rate derivatives and foreign exchange market. ¹² This survey measures the "turnover," or volume of transactions, in foreign exchange and interest rate derivatives within the United States. The Federal Reserve Bank of New York survey only includes data from dealers located within the United States and transactions that are located within the United States. Dealers located outside of the United States report their figures to the central bank where they are located. Defendants Bank of America, Bank of Tokyo-Mitsubishi, Barclays Capital, Citigroup, Deutsche Bank, Mizuho, HSBC, JP Morgan, RBS, Société Générale, Sumitomo Mitsui, and UBS each

¹¹ See The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States, The Federal Reserve Bank of New York

¹² For the latest survey, *See The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States, April 2010*, Federal Reserve Bank of New York (Apr. 2010).

participated in the Federal Reserve Bank of New York's survey of foreign exchange and interest rate derivatives dealers throughout the Class Period, indicating that they entered into foreign exchange and interest rate derivatives transactions from within the United States.

AGENTS AND UNNAMED CO-CONSPIRATORS

106. Various other entities and individuals, including, but not limited to, dealer subsidiaries and/or affiliates of the Contributor Bank and Broker Defendants participated as co-conspirators and manipulators in the acts complained of and performed acts and made statements that aided and abetted and furthered the unlawful conduct as alleged herein. The unnamed co-conspirators, along with the above-named Defendants, performed, participated in, furthered, and/or combined, conspired, or agreed with others to perform the unlawful acts alleged herein, including the restraint of trade, fixing, and manipulation of Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen-based derivatives.

SUBSTANTIVE ALLEGATIONS

I. Background

A. Euroyen TIBOR and Yen-LIBOR

- 107. Euroyen TIBOR and Yen-LIBOR are daily reference rates intended to reflect the interest rates at which banks offer to lend unsecured funds denominated in Japanese Yen to other banks in the offshore wholesale money market (or interbank market), also known as the Euroyen market. The higher the credit risk for a bank (or credit risk environment), the higher the rate that bank would (and should) have to pay for borrowing unsecured funds denominated in Japanese Yen in the Euroyen market.
- 108. Yen-denominated interest rate issues that settle during European trading hours are generally priced using the BBA's Yen-LIBOR, while Yen-denominated interest rate issues that settle during Asia-Pacific trading hours are generally priced using the JBA's Euroyen TIBOR.

However, either rate may be used. *See*, *e.g.*, ¶¶ 644-653 (discussing the interrelationship between Euroyen TIBOR and Yen-LIBOR).

- 109. In addition to their use as benchmarks in pricing loans, Euroyen TIBOR and Yen-LIBOR are used as the basis for settlement of interest rate derivatives contracts traded on major futures and options exchanges and in over-the-counter markets. Euroyen TIBOR is used as the final settlement benchmark for three-month Euroyen TIBOR futures contracts, the most actively traded non-U.S. dollar interest rate contract in the world. Billions in notional value of domestic (U.S. based) transactions in Euroyen futures contracts were transacted during the Class Period.
- 110. Euroyen TIBOR is set through the JBA by its member banks. The JBA designates a minimum of eight (8) reference banks to provide daily rate quotes for the calculation of Euroyen TIBOR rates. According to the JBA, "[t]he selection of reference banks is based on four factors: (1) market trading volume..., (2) Yen asset balance, (3) reputation, and (4) track record in providing rate quotes. (The selection also takes into account JBA TIBOR continuity and the variety of financial sectors to which reference banks belong.)."
- 111. Euroyen TIBOR is calculated on each business day as of 11:00 a.m. Tokyo time. Each Euroyen TIBOR reference bank quotes Euroyen TIBOR rates for thirteen (13) maturities (1 week and 1-12 months).
- 112. In calculating Euroyen TIBOR rates, quotes are discarded from the two highest and the two lowest financial institutions and the remaining quotes are then averaged.
- 113. The reference banks quote what they deem to be the prevailing market rates, assuming transactions between prime banks on the Japanese offshore market as of 11:00 a.m., unaffected by their own positions.

- 114. Yen-LIBOR is set through the BBA by its member banks. According to the BBA, each contributor bank is selected to "reflect[] the balance of the market." Each contributor bank is selected based upon the following criteria "the scale of market activity, reputation and perceived expertise in the currency concerned."
- 115. Yen-LIBOR is calculated each business day as of 11:00 a.m. London time. Each Yen-LIBOR reference bank quotes Yen-LIBOR for fifteen (15) maturities, ranging from overnight to twelve months, including three months.
- 116. In calculating Yen-LIBOR, contributed rates are ranked in descending order and the arithmetic mean of only the middle two quartiles is used to formulate the resulting BBA Yen-LIBOR calculation. The contributor banks respond to the BBA's question: "At what rate could you borrow funds, were you to do so by asking for and then accepting inter-bank offers in a reasonable market size just prior to 11 am?"
- 117. Thomson Reuters serves as the BBA's agent for the collection, calculation, publication, and dissemination of the daily Yen-LIBOR.
- 118. Both the JBA and BBA prohibit banks from reporting rates that reflect factors unrelated to prevailing costs of borrowing unsecured funds in the Euroyen market, *i.e.*, submissions that are based on the banks' Euroyen-based derivatives positions. Notwithstanding this blanket prohibition, the Contributor Bank Defendants, aided and abetted by the Broker Defendants, systematically reported false, Yen-LIBOR and Euroyen TIBOR rates to the BBA and JBA in order to skew those rates in artificial direction that financially benefitted their Euroyen-based derivatives positions.
- 119. Defendants manipulated Yen-LIBOR and Euroyen TIBOR, in part by exploiting the fact that a certain number of quotes are discarded before the published rates are calculated.

In addition to making false submissions that were directly included in the Yen-LIBOR and Euroyen TIBOR calculation, Hayes and his co-conspirators coordinated their submissions to take advantage of this feature, intentionally submitting rates so high or low that they would be cut from the fixing calculation, skewing the rate in the desired direction. As Hayes explained in his SFO interviews:

"So, the way you would influence the actual published LIBOR rate was by dropping in and out of the pack. So you'd either want to be in the top quartile or the bottom quartile...All you'd want to do is drop out, so someone who is, you know in somewhere else within the region would come in and the rate would move very, very slightly."

120. The impact of dropping in and out of the fixing was quantifiable. Hayes and his co-conspirators knew exactly what they could expect from this kind of manipulative conduct and use that to their advantage when trading Euroyen-based derivatives. Below is a communication released during the Hayes Trial where Hayes explains how the Yen-LIBOR fixing is calculated (and how to manipulate it) to his half-brother, Peter O'Leary, a trader at Defendant HSBC:

April 20, 2007:

Hayes: You know how LIBOR's set yeah? Panel of sixteen...

O'Leary: Yeah

<u>Hayes</u>: Cut the top four off. So if he [HSBC] sets it in the bottom four, it move it by an eighth of a basis point, which on the size of the fix I've got is worth like a hundred and twenty five thousand bucks.

121. This strategy of dropping in and out of the fix was extremely effective and implemented by Hayes and his co-conspirators when they needed to move Yen-LIBOR in a specific direction very quickly. For example, during May 2009, Hayes and a trader at Deutsche Bank, Guillame Adolph, began discussing a long-term manipulation of Yen-LIBOR, whereby they planned to keep six-month Yen-LIBOR artificially higher until August 2009 and then rapidly cause the rate to decrease. *See infra* IV.I.7. In his SFO interview, Hayes explained by

quickly moving from the top quartile to the bottom quartile of Yen-LIBOR submissions, *i.e.*, the two groups that are cut before the published rate is calculated, Hayes and his co-conspirators would shift the published rate lower, causing other banks to also adjust their submission lower, creating a "snowball effect." In another communication released during his criminal trial, Hayes explained this technique to Darrell Read, his primary contact at Broker Defendant ICAP, who in turn referred to the banks that followed Hayes and his co-conspirators' submission as "sheep":

July 21, 2006:

<u>Hayes</u>: colin is back? What is cash looking like?

ICAP Broker [Darrell Read]: He reckons unchanged mate

<u>Hayes</u>: And does he think arb can push 6m lower next month?

ICAP Broker [Darrell Read]: will ask

<u>Hayes</u>: Thx. I guess if Gollum [Guillame Adolph] and co move lower then it will snowball at bit. Plus will have everyone calling it lower for a change

<u>ICAP Broker [Darrell Read]</u>: Asking colin on e-mail at mom...but I think you will be the catalyst. You will definitely get sheep and if there are 3 of you others will join.

122. This demonstrates that there were at least two ways that Defendants could manipulate Yen-LIBOR and Euroyen TIBOR with their submissions: (1) making false submissions that were included in the group of quotes used to calculate the published rate; or (2) making false submissions that were intentionally outside of the group of quotes used to calculate the published rate, forcing another bank's submissions into the average calculation. Both means were used by Defendants throughout the Class Period to rig Yen-LIBOR and Euroyen TIBOR for their financial benefit.

B. Euroyen-Based Derivatives

123. "Euroyen-based derivatives" are financial instruments priced, benchmarked, settled to or otherwise affected by Yen-LIBOR or Euroyen TIBOR. These include, *inter alia*: (i)

Yen-LIBOR and/or Euroyen TIBOR interest rate swaps and options on interest rate swaps; (ii) Yen-LIBOR and/or Euroyen TIBOR forward rate agreements; and (iii) Yen foreign exchange forwards.

1. Interest Rate Swaps and Options on Interest Rate Swaps

- 124. An interest rate swap ("swap") is a financial derivatives instrument in which two parties agree to exchange interest rate cash flows. If, for example, a party has a transaction in which it pays a fixed rate of interest but wishes to pay a floating rate of interest tied to a reference rate (*e.g.*, Yen-LIBOR or Euroyen TIBOR), it can enter into a swap to exchange its fixed rate obligation for a floating rate one. For example, Party A pays a fixed rate to Party B, while Party B pays a floating interest rate to Party A indexed to a reference rate like Yen-LIBOR or Euroyen TIBOR. There is no exchange of principal amounts, which are commonly referred to as the "notional" amounts of the swaps transactions. Interest rate swaps indexed to Yen-LIBOR and/or Euroyen TIBOR were widely traded in the U.S. during the Class Period.
- are traded over-the-counter and allow two counterparties to exchange interest rate payment obligations on an agreed upon "notional," *i.e.*, principal, amount. There are several types of interest rate swaps. The simplest interest rate swap is a "plain vanilla" interest rate swap, which involves the exchange of a fixed stream of interest rate payments, *e.g.* 2% per year, for one based on a "floating" reference rate, *e.g.*, Yen-LIBOR, which may change every day.
- 126. The parties to a plain vanilla interest rate swap are typically referred to by their relationship to the stream of fixed interest rate payments. The party exchanging its floating rate obligation for a stream of fixed interest rate payments is known as the "receiver," while the party making fixed interest rate payments in exchange for a stream of payments tied to a floating reference rate is known as the "payer."

- 127. Payment under an interest rate swap is due at regular intervals, *e.g.*, every sixmonths, for the life of the agreement. Each time a payment is due, the amounts owed by the payer and receiver are netted against each other. Only the party with the larger obligation, fixed or floating, makes a payment reflecting the difference between the two interest rates as applied to the agreed upon notional amount.
- 128. The value of an interest rate swap is represented by the difference between the total interest to be paid and received under the swap agreement. For example, if the total present value of interest owed to a party is greater than the total present value of the interest that the party must pay out over the life of the interest rate swap, then the swap has a positive value. As a result, Yen-LIBOR directly impacts the value of Yen-LIBOR-based interest rate swaps by determining the value of the floating rate payments due under that swap contract.
- 129. A "swaption" is an option on an interest rate swap. Distinct from a forward interest rate swap, where counterparties agree to enter into an interest rate swap in advance, a swaption gives the buyer the right, but not the obligation, to enter into an interest rate swap with the swaption issuer on a specified future date, known as the "exercise date."
- 130. The value of a swaption is determined by the value of the underlying interest rate swap. As a result, a swpation that gives the buyer the right to enter into a Yen-LIBOR-based interest rate swap will be directly impacted by a change in Yen-LIBOR because Yen-LIBOR directly determines the value of the interest rate swap underlying that swaption.

2. Forward Rate Agreement

131. A forward rate agreement ("FRA") is an interest rate forward contract. The contract sets rate of interest to be paid or received on an obligation beginning at a future start date. The contract will determine the interest rate to be used along with the termination date and notional value. On this type of agreement, it is only the differential that is paid on the notional

amount of the contract.

3. Foreign Exchange Forwards

132. A foreign exchange forward is an agreement where one party agrees to buy or sell a certain amount of a specified currency, *e.g.*, Yen, from another party on some future date. The value of this agreement is calculated by taking the "spot price," *i.e.*, the cost of Yen for immediate delivery, and adjusting it to account for the "cost of carry," *i.e.*, the amount of interest paid or received on Yen deposits, over the duration of the agreement, using the industry standard formula below.¹³

Future Price = Spot Price
$$x \left(\frac{1 + [Rterm x (d / 360)]}{1 + [Rbase x (d / 360)]} \right)$$

133. The rate of interest used in this calculation is Yen-LIBOR. The CFTC in its settlements with Defendants RBS and Rabobank has expressly found that Yen foreign exchange forwards are "priced based on" (Ex. B.4 at 6) or "priced off of" (Ex. D-2 at 6) Yen-LIBOR. Yen-LIBOR is incorporated into the formula shown above as either "Rbase" or "Rterm" depending on whether Yen are being purchased or sold in the transaction. ¹⁴ Thus Yen-LIBOR is

¹³ See e.g., John W. Labuszewski, Sandra Ro & David Gibbs, *Understanding FX Futures*, CME Group, at 3, 8, http://www.cmegroup.com/education/files/understanding-fx-futures.pdf (hereinafter "Understanding FX Futures") (applying pricing formula to both currency futures contracts and forwards).

¹⁴ Foreign exchange forwards involve a currency pair, e.g., JPY/USD. In each pair, the first currency listed is

used to calculate the cost of carrying Yen over the duration of the foreign exchange forward, indicated by the variable "d."

II. <u>Defendants Restrained Trade and Intentionally Manipulated Euroyen-Based</u> <u>Derivatives Prices By Falsely Reporting Euroyen TIBOR and Yen-LIBOR Rates to the JBA and BBA</u>

- 134. Defendants methodically and purposefully manipulated the prices of Euroyen-based derivatives through their deliberate and systematic submission of false Euroyen TIBOR and Yen-LIBOR rates to the JBA and BBA throughout the Class Period. Defendants did so in order to unlawfully profit financially from the trading Euroyen-based derivatives held by them or their co-conspirators.
- submitters regularly and improperly conspired with and agreed to change their bank's Euroyen TIBOR and/or Yen-LIBOR submissions at the request of Euroyen interest rate derivatives traders employed by their bank or other Contributor Bank Defendants. As revealed by the settlements to date, this was an open, common and pervasive practice of each Contributor Bank Defendant's trading desks, even involving traders discussing their manipulative requests before sending them to their Euroyen TIBOR and/or Yen-LIBOR submitters. As a direct, intended and proximate consequence of the Contributor Bank Defendants' unlawful conduct, the Contributor Bank Defendants manipulated the prices of Euroyen-based derivatives to artificial levels throughout the Class Period.
- 136. Each Contributor Bank Defendant's interest rate derivatives traders also regularly and improperly conspired with each other, traders at other Contributor Bank Defendants, and

referred to as the "Base Currency" while the other, is referred to as the "Term Currency." As prices are typically quoted "in terms of" units of the Term Currency, *e.g.*, for JPY/USD the number of dollars per one Yen, the currency listed first will depend on which currency is being purchased/sold by the buyer/seller. The variables Rterm and Rbase refer to the rate of interest paid on deposits of the Term Currency and Base Currency, respectively, and will change depending on the order of the currency pair.

brokers employed by the Broker Defendants to coordinate their false Yen-LIBOR and/or Euroyen TIBOR submissions. By coordinating their Yen-LIBOR and/or Euroyen TIBOR submissions, Defendants maximized the manipulative and anticompetitive impact of their submissions on Yen-LIBOR and/or Euroyen TIBOR. This coordination financially benefited Contributor Bank Defendants' by increasing the value of their Euroyen-based derivatives positions.

137. Defendants knew that the JBA and BBA used the false rates Defendants submitted to calculate and publish Euroyen TIBOR and Yen-LIBOR. Defendants also knew that their false Euroyen TIBOR and Yen-LIBOR submissions as well as the false resulting Euroyen TIBOR and Yen-LIBOR fix were transmitted throughout the world, including from within and into the U.S. Defendants also knew, as sophisticated market participants, that the (mis)information they reported impacted the prices of Euroyen-based derivatives traded by U.S. investors.

III. Defendants Restrained Trade and Manipulated the Prices of Euroyen-Based Derivatives By Their Illegitimate, Non-Bona Fide Trading of Euroyen-Based Derivatives

knew the prices of such financial instruments were being distorted by Defendants' systematic false reporting of Euroyen TIBOR and Yen-LIBOR (among other unlawful collusive and manipulative conduct). This destroyed the legitimate price discovery function of Euroyen-based derivatives, created or contributed to prices which were not reflective of legitimate forces of supply and demand, and furthered Defendants' conspiracy to manipulate and unlawfully restrain trade in and fix the prices of Euroyen-based derivatives to artificial levels during the Class Period to the detriment of Plaintiffs and the Class. Because Defendants' positions were illegitimate and manipulative parts of the supply-demand equation for Euroyen-based

derivatives, Defendants' impact on Euroyen-based derivatives was necessarily an artificial one that restrained trade and caused artificial prices.

139. Defendants' derivatives traders, by knowing their Euroyen-based derivatives positions, knew the amount of their exposure to movements in Euroyen TIBOR and Yen-LIBOR. For example, on any given day, the derivatives traders may have had exposure to Euroyen TIBOR and/or Yen-LIBOR in particular maturities if payments were owed to or by them on OTC interest rate swap contracts or if the derivatives traders had traded Euroyen futures settling on that day. The amount owed to or by the traders was affected by movements in Euroyen TIBOR and/or Yen-LIBOR. A beneficial movement could have made the derivatives traders a profit or reduced a loss. In the foregoing context, each Defendant's derivatives traders repeatedly communicated with the Euroyen TIBOR and/or Yen-LIBOR submitters at that Defendant in order to cause their firm to make false Euroyen TIBOR and/or Yen-LIBOR submissions that favored the traders' Euroyen-based derivatives positions.

IV. <u>Defendants' Unlawful Conduct Has Led to Deferred Criminal Prosecution Agreements, Criminal Charges, Guilty Pleas and Settlements Resulting in the Payment of Fines and Penalties in Excess of \$7 Billion to Governmental Authorities in the U.S. and Abroad</u>

- 140. Defendants' unlawful conduct has resulted in agreements with government regulators resulting in the collective payment to date of over \$7 billion in fines and penalties (among other relief) by Defendants UBS (\$1.5 billion), RBS (\$964 million), ICAP Europe Limited (\$87 million), Rabobank (\$1 billion), R.P. Martin (\$2.5 million), Deutsche Bank (\$2.5 billion), Lloyds (\$269 million), JPMorgan (\$108 million), Citigroup (\$94 million) and Barclays (\$450 million) for their manipulation of Yen-LIBOR and/or Euroyen TIBOR (among other rates) and the prices of Euroyen-based derivatives.
- 141. The settlements resolve DOJ, CFTC, FSA, NYSDFS and EC criminal and/or civil charges relating to restraints of trade and manipulation of Yen-LIBOR, Euroyen TIBOR and the

prices of Euroyen-based derivatives. The factual findings that accompanied the UBS, RBS, Rabobank Barclays, and Deutsche Bank settlements each included a "Statement of Facts" ("SOF") (of which UBS, RBS, Rabobank, Barclays, and Deutsche Bank, respectively, admitted as "true and accurate") attached to, and incorporated by reference in, various non-prosecution or deferred prosecution agreements entered with the DOJ's Criminal Division, Fraud Section.

- 142. Defendants created an environment that promoted, indeed encouraged and rewarded, the pervasive manipulative and collusive conduct. Throughout the Class Period, the Contributor Bank and Broker Defendants used several principal and interrelated methods to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives including: (i) falsely reporting their own Yen-LIBOR and/or Euroyen TIBOR submissions; (ii) colluding with cash brokers, including the Broker Defendants, to influence other Contributor Banks' Yen-LIBOR and/or Euroyen TIBOR submissions; and (iii) colluding directly with Euroyen-based derivatives traders (among others) at other Yen-LIBOR and/or Euroyen TIBOR Contributor Banks, either directly or through the Broker Defendants, in order to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives.
 - A. <u>Defendants Created an Environment Ripe For the Pervasive and Persistent</u>

 <u>Manipulation of Yen-LIBOR, Euroyen TIBOR and the Prices of Euroyen-Based</u>

 <u>Derivatives</u>
 - 1. The Contributor Bank Defendants Created Inherent Conflicts of Interest that Corrupted their Yen-LIBOR and Euroyen TIBOR Submission Process and Facilitated Their Unlawful Manipulation and Collusion
- 143. The driving force of Defendants' manipulation of Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives was simple: greed. Because of the high-notional value of Euroyen-based derivatives, even very small movements in Yen-LIBOR and/or Euroyen TIBOR would have a significant positive impact on the profitability of the Contributor Bank Defendants' Euroyen-based derivatives positions, and a correspondingly negative impact on their

counterparties' (including U.S. counterparties') trading positions. Thus, because traders' compensation was based in part on the profit and loss calculation of the Contributor Bank Defendants' trading books, the manipulation of prices of Euroyen-based derivatives was a substantial financial benefit to their traders' compensation.

a. Defendants Permitted Traders – Whose Compensation Was
 Directly Linked to Their Success in Trading Euroyen-Based
 Derivatives – To Improperly Influence Their Yen-LIBOR and Euroyen TIBOR Submissions.

i. <u>UBS.</u>

- 144. Until August 2008, UBS had no specific internal controls or procedures governing its Yen-LIBOR and Euroyen TIBOR submissions to manage the conflicts of interest or ensure that its submissions did not take into account impermissible factors, such as UBS's Euroyen-based derivatives positions. UBS provided no training concerning the benchmark interest rate submission process or how to manage the inherent conflict between making such submissions, and the fact that the trader-submitters were supposed to make money for UBS.
- 145. UBS made trader-submitters who worked in UBS's Investment Banking Division responsible for making all benchmark interest rate submissions. From at least January 2005 through September 2009, derivatives traders, who sat on Short Term Interest Rate ("STIR") trading desks in Zurich and traded short-term derivatives products, made submissions for Yen-LIBOR and Euroyen TIBOR. UBS's derivatives traders traded Yen-LIBOR and Euroyen TIBOR-based swaps, FRAs, and futures contracts. Many of their derivatives contracts settled or reset on IMM dates, which made the Yen-LIBOR and Euroyen TIBOR rates on these particular dates especially important.
- 146. The STIR desk generated significant income for UBS by trading derivatives products, whose value depended on Yen-LIBOR and Euroyen TIBOR. STIR also managed

UBS's short-term cash position and engaged in cash trading in the money markets for each currency, primarily through traders located in Connecticut, Zurich and Singapore. STIR was also responsible for hedging UBS's interest rate risk.

- 147. Even after conducting a limited review and developing some procedures for its

 U.S. Dollar LIBOR submission process in mid-to-late 2008, UBS did not remove the inherent
 conflicts of interest as alleged herein or provide any training to their trader-submitters. Rather
 than strengthening internal controls and removing the inherent conflicts of interest, UBS
 delegated oversight responsibility for Yen-LIBOR and Euroyen TIBOR submissions to managers
 who not only knew that derivatives traders and trader-submitters were engaged in efforts to
 manipulate the official fixings of Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen-based
 derivatives, but who also made their own requests for submissions to benefit their own individual
 Euroyen-based derivatives trading positions. Certain derivatives traders, trader-submitters and
 managers completely disregarded the few procedures UBS eventually implemented.
- 148. In September 2009, UBS transferred responsibility for determining Yen-LIBOR submissions to Asset and Liability Management ("ALM") located in Zurich. In January 2010, ALM also became responsible for UBS's Euroyen TIBOR submissions.
- 149. Prior to September 2009, ALM pushed the trader-submitters to consider directions that the Yen-LIBOR and Euroyen TIBOR rates should move and eventually provided the trader-submitters with the exact rate ALM wanted them to submit. After ALM assumed such responsibility, other UBS derivatives traders continued to demand preferential submissions. The ALM submitters improperly considered input from UBS traders along with the previous day's submissions in determining their daily rate submissions.

- submitter, UBS created an inherent conflict of interest that compromised the integrity of UBS's rate submission process, and established an environment ripe for derivatives traders and trader-submitters to abuse. UBS's trader-submitters had significant financial interests to make Yen-LIBOR and Euroyen TIBOR submissions that benefited their Euroyen-based derivatives trading positions. UBS's trader-submitters' financial interests were in direct conflict with UBS's duty to make honest and reliable assessments of Yen-LIBOR and Euroyen TIBOR rates, and ensure its submissions were made in accordance with the JBA and BBA's criteria.
- 151. This environment enabled certain derivatives traders to engage in widespread, long-term systematic misconduct to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives within UBS, and in concert with other Contributor Banks and interdealer brokers.

ii. RBS.

- 152. Until March 2012, certain London-based money market traders were responsible for making RBS's Yen-LIBOR submissions. RBS money market traders were responsible for ensuring that the bank met its funding needs each day in all currencies, including Yen. To do so, RBS money market traders engaged in both intra-bank and inter-bank borrowing and lending transactions. RBS money market traders also traded derivatives products that were indexed to, and therefore valued based on, Yen-LIBOR. One money market trader was primarily responsible for making Yen-LIBOR submissions ("Primary Submitter").
- 153. The Primary Submitter considered certain market information in determining RBS's Yen-LIBOR submissions, such as RBS's funding needs, money market transactions, and derivatives prices, "market color" communications with derivatives traders (although against BBA guidelines), information from interdealer brokers, arbitrage transactions, and synthetic cash

deposits in various currencies. But the RBS Primary Submitter also improperly considered requests to benefit derivative traders' positions or his own positions. The RBS Primary Submitter skewed the Yen-LIBOR submissions to benefit those positions.

- 154. RBS Yen derivatives traders traded various Euroyen-based derivatives that were priced based on Yen-LIBOR, which were used to hedge the desk's interest rate risk and also to generate a profit for the desk. Indeed, the statement of an RBS trader makes this motivation clear: "[I]ts [sic] just amazing how libor fixing can make you that much money." Many of their derivatives contracts settled or reset on IMM dates. RBS's derivatives trading books were traded 24 hours a day, from RBS trading desks in the United States, U.K., and Asia under the direction of the RBS Yen Manager and the RBS Senior Yen Trader. The Senior Yen Trader was assisted by a Yen derivatives trader in Connecticut and Yen Trader 1 located in London. Yen Trader 1 also was the backup Yen-LIBOR submitter. At the end of the trading day in Asia, RBS passed its Yen trading book first to London, then to Connecticut, and back to Asia when trading resumed in Asia.
- 155. In October 2006, RBS senior management decided to facilitate collusive communications between derivatives traders and money market traders, some of whom were also Yen-LIBOR submitters, by locating them on the same RBS currency trading desks. This colocation plan was known as the Short-Term Markets Desk ("STM"). The express purpose of STM was to encourage derivatives and money market traders to communicate about the relevant market conditions that could impact trading and funding decisions. The seating arrangement, however, exacerbated the preexisting conflict of interest between the profit motive of traders and the responsibility of submitters to assess what the Yen- submissions should actually be. RBS did not provide any guidance or controls over what constituted appropriate communications between

the derivative traders and money market traders in charge of Yen-LIBOR submissions. The result was an environment where the RBS Yen traders were able to seize opportunities to manipulate Yen-LIBOR to RBS's and their individual financial benefit.

- 156. RBS's Yen derivatives traders did just that and quickly took advantage of this new arrangement. RBS's Yen derivatives traders routinely told the Primary Submitter their trading positions and pushed him to make artificial Yen-LIBOR submissions that would make their Euroyen-based derivatives positions more profitable. If the Primary Submitter was not at the desk, the traders made written demands to submit artificial Yen-LIBOR via Bloomberg chats or instant messages.
- 157. Substitute submitters also ensured that the Yen-LIBOR submissions were beneficial either to the Euroyen-based derivatives held by other RBS traders, or Euroyen-based derivatives positions held in RBS's Yen money market trading book.
- 158. STM was in place formally until mid-2008 and continued informally for Yen traders into 2009. In the spring of 2009, the trading floor was reorganized, and the derivatives traders and submitters were separated onto different desks. The seating change did nothing to slow the scheme. When they were no longer in close proximity to the submitters, the traders increased their use of Bloomberg chats and instant messages to continue demanding artificial Yen-LIBOR submissions that benefitted their Euroyen-based derivatives positions, which were frequently accommodated.

iii. Rabobank.

159. From mid-2005 through early 2011, Rabobank failed to recognize and address the conflicts of interest, and failed to adequately supervise its derivatives traders and submitters.

Further, Rabobank did not have any policies, internal controls or procedures for determining, monitoring or supervising its Yen-LIBOR submissions to ensure that Rabobank's submissions

reflected an honest assessment of the costs of borrowing unsecured funds in the interbank market.

- individuals who traded both cash and derivatives products. In 2004, Rabobank combined its money market desks (which were responsible for cash trading) with its short-term derivatives trading desk. These traders regularly transacted in interbank cash deposits and loans to meet the bank's funding needs each day in all currencies, and in derivatives products, including interest rate swaps, forward rate agreements, foreign exchange forwards, cross-currency swaps, overnight index swaps, and tenor basis swaps. The traders engaged in derivatives transactions not only to hedge risk, but also to generate profits for Rabobank and themselves. Yen-LIBOR submissions, by definition, should reflect only the costs of borrowing in the relevant markets, and not derivatives trading positions. By assigning the Yen-LIBOR submissions to derivative traders whose profits depended upon the fixings of Yen-LIBOR, Rabobank created an inherent conflict of interest.
- 161. This conflict of interest was heightened by the fact that Rabobank had its LIBOR submitters sitting next to and working with the other derivatives traders on trading desks. One dominant derivatives trader simply shouted his requests across the desk to the submitters.
- 162. Even Rabobank managers and at least one senior manager expected the traders and submitters to communicate their individual trading positions. A senior manager in London ("Senior Manager 1"), who was Rabobank's representative to the BBA, oversaw cash and derivatives traders, including the traders responsible for Rabobank's Yen-LIBOR submissions. A former LIBOR submitter himself, Senior Manager 1 encouraged communication among the traders and submitters, and even instructed one Yen-LIBOR submitter to contact derivatives

Rabobank Senior Manager 1 openly discussed individual trading positions across the trading desks, and also utilized Bloomberg chat terminals and email to provide each other with instant and continuous written communication about such positions. This free flow of information and the encouragement of managers ensured that submitters would improperly make Yen-LIBOR submissions beneficial to Rabobank traders' derivatives trading positions.

- 163. Due to the submitters' dual role as submitters and traders, and the open communication policy promoted by senior managers to encourage the sharing of information about trading positions, several submitters routinely used their own and other traders Euroyen-based derivatives trading positions when determining their Yen-LIBOR submissions and thereby skewed their Yen-LIBOR submissions to manipulate Yen-LIBOR. In addition, certain submitters and traders coordinated, at times, with brokers and traders from at least two other panel banks to manipulate Yen-LIBOR.
- 164. By failing to separate responsibilities for the Yen-LIBOR submissions from its trading functions, Rabobank created an inherent conflict of interest that incentivized submitters to prioritize profit over their responsibility to make an honest assessment of the costs of borrowing unsecured funds when submitting rates to the BBA. Rabobank created an environment that yielded unfettered opportunities to manipulate Yen-LIBOR submissions for the benefit of trading positions held by Rabobank's traders, which Rabobank traders took full advantage of. Rabobank's manipulative conduct involved over two dozen traders, including desk managers, and the knowing involvement of at least one senior manager.
- 165. In April 2010, Rabobank received the CFTC's request to conduct an internal investigation of its U.S. Dollar LIBOR practices. During this investigation, a Rabobank senior

manager informed submitters that it was inappropriate for derivatives traders to provide the rates to submit for Yen-LIBOR. Despite an admonishment resulting from the internal investigation, Rabobank failed to improve its internal controls or monitor its traders. Rabobank traders continued their manipulation of Yen-LIBOR through the use of brokers into early 2011.

166. Rabobank's failure to provide internal controls to address benchmark interest rate submissions, allowance of inappropriate communications between traders and Rabobank's submitters, and financial incentive to manipulate the rates amplified the pattern of misconduct, which continued for a number of years.

iv. Lloyds

- 167. Lloyds assigned its money market traders to submit the bank's LIBOR submissions. These traders were charged with raising wholesale funds for Lloyds in various currencies. These traders also traded LIBOR-based products, including those price-based on Yen-LIBOR and Euroyen TIBOR.
- 168. Throughout the Class Period, and up until March 2011, Lloyds did not have any internal controls governing procedures for making Yen-LIBOR submissions. Lloyds did not (1) undertake any efforts to review the integrity of its Yen-LIBOR submission process; (2) put in place any systems or policies detailing the proper process for submitting Yen-LIBOR submissions; (3) provide any training to its submitters on appropriate and inappropriate information to consider when making LIBOR submissions; and (4) monitor its own submissions.
- 169. Lloyds linked its trader-submitter bonuses in part to the profit and loss of its

 Money Markets Desk. The profit and loss of the Money Market Desk were impacted by LIBOR,
 as LIBOR was used for reference rates in large new cash transactions, and where LIBOR was
 fixed determined the profitability of the cash transactions. Further, LIBOR also affected the
 traders' management of existing borrowing and lending facilities. In sum, traders could greatly

improve the desk's profitability (and thus improve their bonuses) by manipulating LIBOR, including Yen-LIBOR, to their advantage. Lloyds failed to develop procedures that would prevent its trader-submitters from taking into account their money market trading positions in setting Lloyds' Yen-LIBOR submission.

170. Lloyds' failure to implement controls and account for the risks involved with its traders setting Yen-LIBOR led to pervasive manipulation of Yen-LIBOR by Lloyds, including collusion with Rabobank to set Yen-LIBOR to benefit the banks' trading positions at the expense of the Class.

v. <u>Deutsche Bank</u>

171. Throughout the Class Period, Deutsche Bank did not have any LIBOR-specific systems and controls in place governing its LIBOR submissions—it did not keep records of which employees made its Yen-LIBOR and Euroyen TIBOR submissions, the rationale behind those submissions, or even train its employees regarding how to make submissions. ¹⁵ Instead, Deutsche Bank promoted a company culture of increasing profits without concern for the overall integrity of the market, including awarding bonuses and promoting employees based on the profits and losses of their trading books. ¹⁶ For example, two LIBOR traders, Christian Bittar and Carl Maine, generated extraordinary profits for Deutsche Bank. Senior management, including Anshu Jain, regarded them as "the best people on the street" and "the best guys [Deutsche Bank's] got." As a result, Bittar, the "guaranteed money maker," and Maine were generously compensated, receiving a combined €30 million bonus based on their 2008 performances alone.

172. Starting in 2006, to increase Deutsche Bank's profits, Anshu Jain (then, the Global Head of Global Markets) and Alan Cloete (the Global Head of Global Financial and

¹⁵ Ex. I-5 at 14.

¹⁶ Ex. I-5 at 14.

Foreign Exchange Forwards) merged the bank's pool trading and money market derivatives ("MMD") desks, creating the Global Financial and Foreign Exchange Forwards ("GFFX") desk. Deutsche Bank's GFFX desks operated in various offices around the world, including its New York office. The sole purpose of creating this seating structure was to make it easier for Deutsche Bank's traders and submitters to communicate regularly so that its LIBOR submitters, including Yen-LIBOR and Euroyen TIBOR, would be aware of the false rates they needed to submit to financially benefit each of the bank's trading positions. This seating strategy, while inherently creating a conflict of interest, proved incredibly profitable for Deutsche Bank, with its MMD desk alone generating €1.9 billion in 2008 and €2.9 billion in 2009.

173. Upon creating the GFFX desk, Deutsche Bank also implemented a new trading strategy, focused on policing the "spread" or difference between certain LIBOR tenors, including Yen-LIBOR. Deutsche Bank's traders capitalized on the relationship between tenors by entering into "massive derivatives basis trading positions" which increased in value as the spread between tenors widened.

174. Deutsche Bank educated its traders and submitters to ensure that this plan was well known and utilized across currency desks. David Nicholls, the Head of Global Finance Europe and other senior traders from Deutsche Bank's London, New York, Tokyo, and Frankfurt GFFX desks held weekly meetings, termed "Monday Risk Calls," where they openly discussed the use of this trading strategy so that everyone involved understood the plan. As a result, the CFTC found that Deutsche Bank's LIBOR submitters, including those who made Deutsche Bank's Yen-LIBOR and Euroyen TIBOR submissions, routinely built this spread "bias" into

¹⁷ Ex. I-1 at 8; Ex. I-6 at 13, 17, 22.

¹⁸ Ex. I-6 at 5.

¹⁹ Ex. I-6 at 6.

Deutsche Bank's LIBOR submissions, pushing the spread between different tenors of LIBOR wider, even in the absence of written communications from traders requesting a specific false rate.

assigning a single employee with the responsibilities of making Deutsche Bank's Yen-LIBOR and Euroyen TIBOR submissions and trading Euroyen-based derivatives, which created an inherent conflict of interest. Prom 2008 through 2009, a senior Yen trader, Trader-11, made Deutsche Bank's Yen-LIBOR submissions and traded Euroyen-based derivative products. Upon information and belief, "Trader-11" from Deutsche Bank's and DB Group Services' DOJ settlements and "Senior Yen Trader-Submitter" from Deutsche Bank's CFTC settlement is Guillaume Adolph. Similarly, at Deutsche Bank's subsidiary, DB Group Services, from 2006 through 2007, Submitter-2 and Submitter-3, two London-based pool traders, were responsible for making Deutsche Bank's Yen-LIBOR submissions and trading Euroyen-based derivative products.

176. This and other conflicts of interest went unnoticed as Deutsche Bank did not have a formal policy about conflicts of interest among traders and submitters relating to its benchmark submissions until February 2013, almost three years after government regulators began their probe into Deutsche Bank's LIBOR-related misconduct.²³ By merging the responsibility of trading Euroyen-based derivatives and making Yen-LIBOR and Euroyen TIBOR submissions into the same desk (and sometimes even the same person), Deutsche Bank intentionally created

²⁰ Ex. I-3 at 11.

²¹ Ex. I-1 at 47.

²² At the Hayes Trial on May 28, 2015, an electronic chat between Hayes and Guillaume Adolph on August 28, 2008 was disclosed. This same electronic communication with Hayes is contained in both Ex. I-2 at 26 and Ex. I-1 at 50-51, with Adolph identified as "Senior Yen Trader-Submitter" and "Trader-11" respectively.

²³ Ex. I-2 at 4.

an environment that provided significant opportunities and incentives to manipulate Yen-LIBOR and Euroyen TIBOR.

2. Defendants Lacked Internal Controls To Oversee Their Involvement in the Yen-LIBOR and Euroyen TIBOR Submission Process and To Monitor Their Communications With Other Banks and Brokers.

a. ICAP.

- 177. During the Class Period, ICAP failed to implement adequate internal controls and procedures to govern its Yen brokers' communications and interactions with clients and prospective clients. Nor did it adequately supervise and oversee its Yen brokers and the Yen and Cash Desks.
- 178. ICAP used a regional-based system of policies, procedures, and controls that applied to all ICAP plc subsidiaries during the Class Period. Further, ICAP did not have its own chief compliance officer. A single person served as the dedicated chief compliance officer for all ICAP plc subsidiaries, including ICAP. This system of compliance failed to detect and deter the wrongful conduct of the ICAP brokers.
- 179. ICAP's regional compliance system lacked internal controls, policies and procedures to guide and monitor Yen brokers in their communications with clients, or the provision of market information to clients and other Contributor Panel banks. Furthermore, ICAP did not have procedures for approving the dissemination of market information, or for verifying the basis for the market information being disseminated by ICAP brokers.

 Accordingly, as alleged in further detail below, "ICAP Cash Broker 1" (later identified to be former ICAP broker Colin Goodman) was able to send out the skewed "Suggested LIBORs" in his Run Thrus without detection.
- 180. ICAP's Yen and Cash Desks were inadequately supervised. The Yen brokers, including the "ICAP Yen Desk Head" (later identified as Daniel Wilkinson), worked with little

to no supervision from senior ICAP management. Cash Broker 1, the only Yen cash broker at ICAP, operated independently with little to no supervision from the head of the Cash Desk. Likewise, ICAP left compliance oversight to the Yen and Cash Desk Heads who were expected to report any suspicious conduct to ICAP's compliance officer. This system of compliance and supervision was of course all but useless as the Yen Desk Head was complicit in the misconduct taking place on the Yen Desk.

- 181. These compliance flaws were exacerbated by the fact that the Yen Desk was not perceived as a potential compliance risk, and was not subjected to any compliance reviews or audits during the Class Period. Since there were no audits of the Yen Desk for more than four years, ICAP did not discover that: (1) former UBS and Citigroup Senior Yen Trader Hayes was Derivatives Broker 1's (later identified as Darrell Read) exclusive client and a significant source of revenue for the ICAP Yen Desk; (2) the ICAP Yen brokers regularly engaged in the manipulation of Yen-LIBOR on behalf of former UBS and Citigroup Senior Yen Trader Hayes; and (3) ICAP successfully negotiated a special bonus for Cash Broker 1's "LIBOR services" which were in fact services to disseminate false market information intended to benefit the Euroyen-based derivatives positions of Senior Yen Trader Hayes.
- 182. ICAP's failure to provide specific internal controls and procedures to determine permissible market information to be provided by its Yen brokers to clients and others, and the overall lack of supervision of the Yen and Cash Desks, allowed the misconduct to continue unabated throughout the Class Period.

b. R.P. Martin.

183. R.P. Martin failed to establish an adequate compliance function, failed to adequately supervise and oversee its Yen brokers and the Yen Desk, and failed to implement

adequate internal controls and procedures to govern its Yen brokers' communications and interactions with clients and prospective clients.

- 184. Prior to February 2010, R.P. Martin did not have a single compliance office or compliance department. Instead, R.P. Martin assigned employees from other departments to handle compliance issues on a part-time basis. For example, R.P. Martin's head of compliance consisted of an inexperienced officer who had other responsibilities that were in conflict with his compliance duties.
- 185. R.P. Martin also failed to ensure that staff were adequately trained and supervised. Staff received little to no compliance training. Further, Desk Heads were given little instruction regarding their roles and responsibilities in supervising the brokers on their desks. Instead, brokers routinely raised concerns and issues directly with senior management, who had earned the reputation of prioritizing the happiness of profitable brokers over ensuring a compliant environment. Senior Management dealt with broker complaints as they arose, rather than ensuring pro-active supervision of brokers and desk heads. R.P. Martin's currency desks, including the Yen Desk, were inadequately supervised. The Yen brokers, including the Yen Desk Head, worked with minimal supervision from senior management.
- 186. As part of this insufficient system of compliance, R.P. Martin did not have adequate internal controls, policies, and procedures to guide and monitor Yen brokers in their communications with clients, or the provision of market information or market color, or for verification of the basis for the market information being disseminated by R.P. Martin brokers. Accordingly, although the improper communications between former UBS and Citigroup Senior Yen Trader Hayes, and R.P. Martin Yen brokers were well-known by most, if not all, of the

brokers on the Yen Desk, no one informed compliance or senior management that such improper conversations were taking place.

- 187. R.P. Martin's lackadaisical attitude towards compliance was evident when the company became aware of UBS's improper broker compensation activity. The R.P. Martin manager who monitored back-office brokerage activity on a daily basis immediately noticed an unusually large amount of commissions generated from "wash trades" in which the same financial instrument was simultaneously purchased and sold, occurring between UBS and RBS. However, when he questioned the Yen Desk about these trades, at least one Yen broker said to him, "You really don't want to know." The R.P. Martin manager discussed the wash trades with at least one member of R.P. Martin senior management but the discussion did not generate any action, and no one at R.P. Martin further investigated why RBS and UBS had agreed to generate unusually large wash trade commissions for the R.P. Martin Yen Desk.
- 188. R.P. Martin's lack of specific internal controls and procedures related to external communications, such as what market information Yen brokers can appropriately send to their clients as well as its overall failure to supervise the Yen Desk, allowed the misconduct to continue unabated.

c. Deutsche Bank

189. Starting in August of 2007, Deutsche Bank's MMD desk's profits skyrocketed.

MMD revenue alone more than quadrupled, increasing from €399 million in 2007 to over €1.9 billion, or roughly 14% of the bank's *total* revenue, in 2008.²⁴ Despite this being a giant red flag in the banking industry, Deutsche Bank's management did not order an internal investigation for well over a year. When Deutsche Bank's Global Head of Global Markets, Anshu Jain, finally

²⁴ Ex. I-2 at 9 n. 16.

launched an investigation in January of 2009, he requested that William Broeksmit, the Head of Capital and Risk-Optimization, look whether the MMD desk's profits were real or caused by false valuations or internal transactions (the "Broeksmit Investigation"). The Broeksmit Investigation was not intended to uncover the source of these abnormally large profits, *i.e.*, Deutsche Bank's pervasive LIBOR manipulation, but rather only skimmed the books to find out whether these profits actually existed. Because of the limited nature of the Broeksmit Investigation, Deutsche Bank continued to profit from its LIBOR manipulation.

Global Markets, Henry Ritchottes, requested that the Business Integrity Review Group ("BIRG") conduct a review into whether Deutsche Bank's profits were a fraud (the "BIRG Review").

Deutsche Bank assigned only one person, Mr. Mulcany, with the task of reviewing a tremendous amount of documents (over 800,000). Worst of all, many of the documents were written in French, a language that Mr. Mulcany did not even speak. The BIRG Review further failed because it used an incomplete list of search terms, failed to detect many of the important later-discovered communications, and lacked any independence—as Mr. Cloete, the head of the very division that was being investigated, was allowed to make changes to the report before it was passed off. On November 30, 2009, Mr. Cloete further compromised the BIRG Report, making "the situation appear better" by removing all compliance-related topics before it was presented to the Management Board, ensuring that Deutsche Bank would not implement any measures to restrict the GFFX desk's profits. 27

²⁵ Ex. I-6 at 21

²⁶ Ex. I-6 at 10.

²⁷ Ex. I-6 at 21, 24.

191. Both of these investigations were inadequate responses to the major red flags that Deutsche Bank's LIBOR-submission process raised. As a result, Deutsche Bank's traders and submitters continued to manipulate Yen-LIBOR and Euroyen TIBOR without any consequences.

d. UBS

- 192. UBS also did not have any systems or controls in place to monitor its LIBOR submission process, which permitted its traders and submitters to manipulate LIBOR.²⁸ When UBS' Compliance department launched an internal review of its LIBOR submission processes and procedures (the "2008 Review"),²⁹ it chose to limit its 2008 Review solely to U.S. Dollar LIBOR, ignoring the likely possibility that its traders and submitters, who management placed next to each other on the STIRs desk, were involved in manipulating LIBOR for multiple currencies—a reality confirmed by UBS' guilty plea to wire fraud in connection with its LIBOR-related misconduct.³⁰
- 193. To ensure the 2008 Review did not uncover LIBOR-related misconduct, UBS' Compliance department placed one of the Bank's own LIBOR submitters in charge. This created a direct conflict of interest, giving the submitter an opportunity to conceal any misconduct that might get him or his friends in trouble. For example, the LIBOR submitter selected to lead the 2008 Review had himself received at least one request for a false LIBOR submission during the relevant period. Proof that the 2008 Review was a sham, the LIBOR submitter found nothing wrong with UBS' USD LIBOR submission process even though he had direct knowledge that UBS' traders were manipulating LIBOR. USS' Compliance department

²⁸ Ex. A-1 at 34.

²⁹ *Id.* at 27.

³⁰ United States v. UBS AG, Plea Agreement, No. 15-cv-76, ECF No. 6, at 1.

³¹ Ex. A-3 at 28.

³² See, e.g., id.

naïvely terminated its limited inquiry into the LIBOR submitting process at the bank, permitting UBS' LIBOR manipulation to continue without consequence.

194. To give the appearance that UBS was making a serious effort to end LIBOR-related misconduct, Compliance decided in August 2008 that it was finally time to draft formal procedures and guidelines (the "2008 Guidelines") for UBS' LIBOR submission process. The 2008 guidelines, like the 2008 Review, were also a sham and never actually circulated to UBS' employees. UBS' Compliance department only drafted them as a protective measure, in the event they were ever questioned about what procedures they had in place. The 2008 Guidelines were illusory, and neglected to address key failures within the bank's LIBOR submission process: the inherent conflicts of interest (*e.g.* assigning trading and submitting responsibilities to the same individual at the STIR desk) and lack of training for LIBOR submitters on how to properly calculate UBS' daily LIBOR submission.

195. The 2008 Guidelines also created an "exception reporting regime" intended to give the appearance that UBS actively monitored its LIBOR submissions for false reporting. Under this new system, compliance was to make weekly comparisons of UBS' LIBOR submissions to UBS' actual cost of borrowing and/or the published LIBOR for the day. Large differences would be considered "exceptions" and flagged for further review. While this sounded good on paper, compliance configured the exception reporting regime to only be triggered by extremely large differences between UBS' LIBOR submission and actual cost of borrowing, effectively neutering the system. As a result, despite UBS' admitted false reporting

³³ *Id.* at 29-30.

in multiple LIBOR currencies throughout the Class Period, the exception reporting regime did not detect a single false LIBOR submission while it was in place.³⁴

3. The Contributor Bank and Broker Defendants' Yen Desk Managers Were Active Participants in the Pervasive and Persistent Manipulation of Yen-LIBOR, Euroyen TIBOR and Euroyen-Based Derivatives Prices by Their Traders, Submitters and Brokers

a. UBS.

LIBOR, Euroyen TIBOR and Euroyen-based derivatives prices by their derivatives traders. For example, former Senior Yen Trader Hayes's manager knew, at least as early as 2007, that internal pressure was placed on UBS Yen-LIBOR submitters, and the Euroyen TIBOR submitters, to contribute submissions to benefit the Yen trading book. Further, certain Zurich-based managers and more senior managers heading the derivatives desks in all currencies were informed of the pressure the Yen trading desk placed on the Yen-LIBOR submitters to contribute submissions that would benefit UBS and their traders' Euroyen-based derivatives positions.

197. For example, the FCA determined (a) at least four UBS Managers were directly involved in Internal Requests; (b) at least three further Managers were aware of Internal Requests; (c) at least four Senior Managers were aware of Internal Requests; (d) at least one Manager was directly involved in Broker Requests; (e) at least one further Manager was aware of Broker Requests; (f) at least three Managers were aware of External Requests; and (g) at least one Senior Manager was aware of External Requests. In total, requests to manipulate Yen-LIBOR directly involved approximately 40 individuals at UBS, 11 of whom were managers. Furthermore, the practice of submitting false Yen-LIBOR submissions to benefit Euroyen-based

³⁴ *Id.* at 29.

trading positions was often openly discussed between certain individuals in open chat forums and in group emails, which included at least 70 individuals at UBS.

198. UBS managers were also on notice of UBS Senior Yen Trader Hayes's communications with his counterpart traders and Yen-LIBOR submitters at other Contributor Panel Banks about obtaining favorable and artificial Yen-LIBOR submissions to benefit his Euroyen-based derivatives positions. In a July 3, 2009 email, UBS Hayes's manager, in an attempt to keep Hayes from leaving for another bank, lobbied other UBS managers to award a sizable bonus to Hayes. In the email, Hayes's manager listed some of his attributes, such as "strong connections with Libor setters in London. This information is invaluable for the derivatives books." This email was sent to a senior manager of the Investment Bank in Zurich, who forwarded it to derivatives desk managers, asking for their input. One manager replied:

[Hayes] does also know some of the traders at other banks (from his London days) but personally I find it embarrassing when he calls up his mates to ask for favours on high/low fixings . . . it makes UBS appear to manipulate others to suit our position; what's the legal risk of UBS asking others to move their fixing?

- 199. Despite these communications to UBS managers and senior managers, no one at UBS disciplined or even reprimanded Hayes, and no one referred the matter to compliance. Hayes continued working as a derivatives trader at UBS until he left following a compensation dispute in September 2009 to work for Defendant Citigroup.
- 200. The majority of UBS Yen-LIBOR and Euroyen TIBOR submitters, Yen derivatives traders, and their supervisors as well as the more senior managers at UBS who were aware of this conduct knew that the submission of false Yen-LIBOR and Euroyen TIBOR rates was inappropriate, yet continued to encourage, allow, and participate in this conduct. For example, Hayes's manager, a senior manager in the Investment Bank, the primary Yen-LIBOR

and Euroyen-TIBOR submitters, and other derivatives traders knew it was contrary to the definition of Yen-LIBOR and Euroyen TIBOR to consider derivative trading positions in making their Yen-LIBOR or Euroyen TIBOR submissions. On October 9, 2008, Submitter-1 complained to several other managers that: "one of the things we signed up for when UBS agreed to join the fixing panel was the condition that fixing contributions shall be made regardless of trading positions."

201. As an active participant in the manipulation of the Euroyen rates, a UBS derivatives desk manager sought to obstruct the investigation of the LIBOR manipulation. For example, in December 2010, Submitter-4, the UBS derivatives desk manager who supervised UBS Submitter-2 in 2009, instructed Submitter-2 to lie to UBS attorneys during the investigation. Among other things, the UBS manager instructed Submitter-2 to (a) falsely claim that the UBS Yen trading desks did not have any derivative positions with exposure to Yen-LIBOR; (b) avoid mentioning Senior Yen Trader Hayes; (c) falsely indicate that the Yen-LIBOR submission process did not take into account trading positions; (d) falsely claim that they never moved the Yen-LIBOR submissions to benefit the Yen trading desks; (e) falsely claim that when contributing Yen-LIBOR submissions, UBS tried to be "as close to the market as possible."

b. RBS.

- 202. At least two RBS managers were aware of significant conflicts of interest with derivatives traders acting as backup Yen-LIBOR submitters. Moreover, one of these managers was aware of, and at times participated in, the manipulation of the RBS Yen-LIBOR submissions by derivatives traders.
- 203. For example, on August 22, 2007, Manager-l (employed by Defendant RBS Japan at this time) became aware that Trader-2, who acted as a backup Yen-LIBOR submitter that day,

made RBS's submission for his own benefit. Manager-1 asked, "Hi Mate, where are u calling the 6m and 3s Libor today?" Trader-2 responded, "i put in 1.05 and 1.15." Manager-1 said "ok cool. . . is that close to consensus?" to which Trader-2 responded, "i think my 3s are too high . . . 6s will prob be 1.13 too . . . but i wanted high fixes today." Later, Trader-2 asked, "well let me know if you have any preferences . . . each day." Manager-1 responded, "thx will do."

204. In an electronic chat on December 3, 2007, Manager-1 communicated his own requests for the direction of Yen-LIBOR to Trader-3, with whom he shared a Yen trading book. Manager-1 said to Trader-3, "for choice we want lower libors... let the MM [money market] guys know pls." Trader-3 responded that he was serving as the submitter that day "as [Trader-2] and cash guy off." Manager-1 then said "great. . . set it nice and low." Trader-3 suggested 1.02 "or lower" for the 6-month Yen-LIBOR submission, to which Manager-1 responded, "yeh lower." Trader-3 indicated that he could go down one more basis point to 1.01, which he did - making RBS the lowest of all Contributor Panel Banks whose Yen-LIBOR submissions were counted in that day's fixing. *See, e.g.*, Chronological Appendix ("App.") at 17, 21, 57.

c. Rabobank.

- 205. Rabobank "Submitter-3" as identified in the Rabobank DOJ SOF, was Rabobank's Global Head of Liquidity and Finance. Submitter-3 was the head of Rabobank's money market desk in London, directly supervising other Rabobank Yen-LIBOR Submitters. Submitter-3 knew that requests were made to Rabobank's Yen-LIBOR submitters to contribute false submissions to benefit swaps traders' trading books, and he not only tolerated such activity, but directly participated in it.
- 206. Rabobank "Trader-9" later replaced Submitter-3 as the Global Head of Liquidity and Finance, previously having served as the Head of Liquidity and Finance for Europe. Trader-

9 was the head of Rabobank's money market desk in Utrecht, directly supervising other Rabobank LIBOR Submitters. Trader-9 was informed that Rabobank Trader-5 would forward requests to the submitters under Trader-9's supervision, but Trader-9 did not act to stop such conduct. Further, many of the submitters under Trader-9's supervision were not trained to calculate LIBOR submissions, which increased the ability for traders to exert substantial influence on the submitters and for Trader-5 to take over the Yen-LIBOR setting process.

- 207. In addition, Rabobank Trader-6 was the head of Global Financial Markets
 Trading for Tokyo and, starting in October 2008, the head of Global Financial Markets for
 Tokyo. Trader-6 was the head of Rabobank's Yen trading desk in Tokyo, directly supervising
 numerous Rabobank traders who made numerous requests to Rabobank's Yen-LIBOR
 submitters to financially benefit their trading books. Trader-6 also made numerous requests to
 Rabobank's Yen-LIBOR submitters to benefit his own trading book, was aware of the fact that
 Rabobank Trader-5 made similar requests, and directed Trader-5 to make requests on Trader-6's
 behalf.
- 208. Further, Rabobank Trader-4 was the Head of Money Markets and Derivatives

 Trading for Northeast Asia and the Head of Local Currency Trading for Asia Pacific, eventually
 being promoted to Head of Liquidity and Finance for Asia Pacific in November 2010. Trader-4
 not only was aware of the fact that Trader-5 made requests to Rabobank's Yen-LIBOR
 submitters to benefit his Euroyen-based derivatives trading book, but Trader-4 previously made
 numerous such requests on his own behalf.

d. Lloyds.

209. At least four managers at Lloyds were aware of Yen-LIBOR manipulation by its submitters, how the scheme functioned, and the profits the scheme would generate for the bank.

In one example, on July 19, 2007, a Lloyds trader-submitter and a manager discussed a request from a Lloyds trader for a low Yen-LIBOR submission. In relaying the request, the trader-submitter remarked that "every little helps . . . It's like Tescos," an ironic play on the slogan of the British multinational grocery and merchandise retailer known for providing a good value and taking care of its customers. Quite the opposite occurred here; Lloyds' profit-making scheme took advantage of incremental manipulations to Yen-LIBOR to provide value to Lloyds at the expense of its customers and the public. The Lloyds manager agreed with the trader-submitter's sentiments, replying "Absolutely every little helps."

e. Deutsche Bank

210. At Deutsche Bank, its managers were not only aware of the bank's Yen-LIBOR and Euroyen TIBOR manipulation, they participated in it. For example, on September 4, 2009, a Deutsche Bank vice president cautioned against making an accurate Euroyen TIBOR submission because the other Contributor Bank Defendants, like UBS and JPMorgan, were submitting lower rates. Instead of submitting an accurate rate, the vice president instructed a trader to lower Deutsche Bank's Euroyen TIBOR submission, directing in a message:

am purring 34 for 3m libor and I think am far too high... JPM [JP Morgan Chase] is putting 41 for tibor... I do not understand how come we can have 3m tibor/cash at 56 at DB... DB is the among the lowest libor contribution in all ccys... UBS is corrup/manipulator in tabor fixing... i think putting such a high tibor damage the reputation of deutsche bank... Second, It is not because all the tibors setters are corrupt/manipulators that deutsche bank has to be aswell... It is not because the japanese banks are manipulating the tibor fixing that DB has to do it as well... *Tibor is a corrupt fixing and DB is part of it!*³⁵

211. Not only was Deutsche Bank's management aware of their traders and submitters manipulation, but Deutsche Bank's managers were active participants in the manipulation as well and failed to take any measures to ensure the integrity of the benchmark.

³⁵ Deutsche Bank NYSDFS Consent Order at 12-13.

212. Deutsche Bank's management went so far as to facilitate requests for false submissions by soliciting requests from its traders, passing them along to the submitters, and following-up to ensure that the favorable submissions were made. For example, in the following communication, the Tokyo Regional Manager reached out to a Deutsche Bank Yen-LIBOR submitter to inquire to whom he should direct his requests for false submissions, the right person was the Senior Yen LIBOR Submitter. Another manager, Yen Desk Manager, had to pass along the request for high one-month and six-month Yen-LIBOR submissions because the Senior Yen LIBOR Submitter did not answer the Tokyo Regional Manager's phone call.

December 21, 2006:

<u>Tokyo Regional Manager</u>: are you doing libors today, esp JPY or is [Senior Yen

LIBOR Submitter]?

Junior Yen LIBOR Submitter: shld be [Yen Desk Manager] setting, let him know yr axes

... i'll be inputting next week if need anything then mate

<u>Tokyo Regional Manager</u>: [Senior Yen Trader-Tokyo] will BBG you next week if he

needs anything .. cheers mate

Follow-up instant message to Yen Desk Manager the same day:

Tokyo Regional Manager: is [Senior Yen LIBOR Submitter] in or are you doing JPY

libors today?

Yen Desk Manager: [Senior Yen LIBOR Submitter] is doing it

Tokyo Regional Manager: he is not picking [Senior Yen Trader-Tokyo] up... could

you ask him to go high in 1m and 6m?³⁷

³⁶ DB CFTC at 23.

³⁷ DB CFTC Order at 24.

- B. <u>Defendants Successfully Manipulated Yen-LIBOR, Euroyen TIBOR, and the</u> Prices of Euroyen-Based Derivatives.
 - 1. Through Their False Reporting of Yen-LIBOR and Euroyen TIBOR, Among Other Unlawful Conduct, the Contributor Bank and Broker Defendants Successfully Manipulated Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives.

a. UBS.³⁸

- 213. Over a period of approximately six years, from at least January 2005 through at least June 2010, UBS Derivatives Traders and Trader-Submitters engaged in sustained, wideranging, and systematic efforts to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives to benefit UBS's trading positions. This conduct encompassed, among other things, hundreds of instances in which UBS employees sought to influence benchmark rates. During some periods, UBS employees engaged in this activity on nearly a daily basis.
- 214. For example, the CFTC determined that UBS Derivatives Traders made approximately 2,000 written requests of UBS's trader-submitters, traders at other panel banks and interdealer brokers to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. The written requests of the UBS Derivatives Traders occurred on approximately 570 trading/reporting days, mostly between late 2006 and late 2009, which is approximately 75% of the days UBS participated in the submissions.
- 215. Former UBS Senior Yen Trader Hayes made at least 800 requests in writing, on UBS's email and chat systems, to the UBS trader-submitters for adjustments to UBS's Yen-LIBOR submissions, usually focused around the one, three and six-month tenors. Hayes and others acting on his behalf also made similar demands for adjustments to the Euroyen TIBOR

³⁸ See also Ex. A-2, pp. 11-17.

trader-submitters to benefit his and UBS's Euroyen-based derivatives trading positions.

Sometimes, Hayes made requests to benefit the trading positions of other UBS Yen Derivatives

Traders on the desk, if it happened that Yen-LIBOR or Euroyen TIBOR fixings would not impact his own positions.

- 216. UBS's submission of false Yen-LIBOR and Euroyen TIBOR to benefit UBS derivatives traders' positions began to occur far more frequently after July 2006, when UBS hired Hayes. Beginning in September 2006, and continuing until soon before he left UBS in September 2009, Hayes, and occasionally other UBS Yen derivatives traders, regularly requested that UBS Yen-LIBOR submitters contribute Yen-LIBOR submissions to benefit their trading books. Hayes and his/her colleagues engaged in this conduct on the majority of total trading days during this more-than-three-year period.
- 217. UBS's Yen derivatives traders' requests typically were for the one, three, and sixmonth tenors for Yen-LIBOR and Euroyen TIBOR. The trader-submitters on many occasions acquiesced to those requests and made Yen-LIBOR and Euroyen TIBOR submissions with the purpose of benefiting UBS's derivative trading positions. The requests were made over UBS's email or chat networks and additional requests were made orally by traders who sat near to or spoke by telephone with trader-submitters, with traders at other banks or with brokers. In addition, certain trader-submitters based submissions at times on his or her own or the desk's trading positions, without consulting with anyone else.
- 218. Multiple UBS traders and submitters, including Hayes's supervisor were aware of Hayes's efforts to manipulate Yen-LIBOR and Euroyen TIBOR through his internal requests to the submitters. UBS managers in Tokyo and Zurich also were aware of Hayes's requests. The UBS managers encouraged and allowed Hayes to engage in his conduct, which ended only when

he decided to leave UBS over a pay dispute. No one involved in or aware of the misconduct reported it as wrongful to more senior management, or to UBS's compliance or legal departments. On the contrary, some of these individuals, including Hayes's Yen Desk Manager in Tokyo, engaged in the same misconduct by making their own requests to UBS's Trader-Submitters for the manipulation of Yen-LIBOR and Euroyen TIBOR, or facilitating Hayes's requests.

- 219. In making requests, Hayes at times identified the tenor and/or direction for which he sought assistance, using terms such as "low 1m" (indicating that he wanted a low submission for the Yen-LIBOR one-month tenor submission), "high 3m" (for the three-month Yen-LIBOR submission) or "unchanged." The requests were so common that Hayes sometimes merely asked for the "usual axe on libors," meaning his typical requests. Certain trader-submitters also understood that Hayes had a "standing order," meaning Hayes had a preference for a higher or lower submission and that this preference remained in operation for a period of several days. Moreover, UBS trader-submitters sometimes initiated contact with Hayes to see if he needed any adjustments made to the Yen-LIBOR submissions.
- 220. Hayes also sometimes emphasized to UBS's trader-submitters when one of his requests was particularly important, such as by saying he had a "big fix" or even a "massive fix." At times, Hayes was more specific, quantifying the potential benefit to UBS's derivatives position: "have 385b 6m fix today so really need it low ... half a point is 10mjpy!" As Hayes once exclaimed to the UBS Senior Yen Trader-Submitter: "I live and die by these libors, even dream about them." (Emphasis added).
- 221. UBS trader-submitters regularly accommodated Hayes's requests. In fact, one UBS Yen trader-submitter indicated that he would at times adjust his submissions by up to

several basis points to accommodate the requests of Hayes. The requests and accommodations occurred on a regular basis even after UBS had received the CFTC Division of Enforcement's demand in October 2008 for information and documents relating to UBS's U.S. Dollar LIBOR submissions.

- Yen-LIBOR submitter ("Submitter-3"), who was substituting for the regular submitter ("Submitter-1") that day: "hi . . . [Submitter-1] and I generally coordinate ie sometimes trade if ity [sic] suits, otherwise skew the libors a bit." Hayes went on to request, "really need high 6m [6-month] fixes till Thursday." Submitter-3 responded, "yep we on the case there . . . will def[initely] be on the high side." The day before this request, UBS's 6-month Yen-LIBOR submission had been tied with the lowest submissions included in the calculation of the LIBOR fix. Immediately after this request for high submissions, however, UBS's 6-month Yen-LIBOR submissions rose to the highest submission of any bank in the Contributor Panel and remained tied for the highest until Thursday as Hayes had requested.
- 223. In early 2007, a new UBS Yen-LIBOR submitter ("Submitter-2") received training from Submitter-1, who was also a UBS manager and Yen derivatives trader. During that training, Submitter-2 was instructed that the primary factor in determining UBS's Yen-LIBOR submissions each day was the UBS Yen derivatives traders' requests, which were to be accommodated. Submitter-2 followed that directive, and accommodated Hayes and other UBS Yen derivatives traders' requests for LIBOR submissions through July 2009, when Submitter-2's responsibilities at UBS changed.
- 224. From at least August 2007 and at various times through at least September 2009, the manager of one of the Yen derivatives trading desks in Tokyo exerted pressure on Yen-

LIBOR submitters to take derivatives traders' positions into account when setting Yen-LIBOR. Yen derivatives traders routinely requested that the submitters contribute Yen-LIBOR submissions to benefit their trading books, and the submitters, in accordance with the instructions from their superiors at UBS, accommodated derivatives traders' requests.

225. An example of such an accommodation occurred on March 29, 2007, when Hayes asked Submitter-1, "can we go low 3[month] and 6[month] pls? . . . 3[month] esp." Submitter-1 responded "ok", and then the two had the following exchange by electronic chat:

<u>Hayes</u>: what are we going to set?

<u>Submitter-1</u>: too early to say yet . . . prob[ably] .69 would be our

unbiased contribution

<u>Hayes</u>: ok wd really help if we cld keep 3m low pls

<u>Submitter-1</u>: as i said before - i [don't] mind helping on your fixings, but i'm

not setting libor 7bp away from the truth. . . i'll get ubs banned if i

do that, no interest in that.

Hayes: ok obviousl; y [sic] no int[erest] in that happening either . . . not

asking for it to be 7bp from reality anyway any help appreciated[.]

- 226. Hayes received the help he requested. Although Submitter-1's "unbiased contribution" of the 3-month Yen-LIBOR submission would have been .69 that day, he lowered his/her submission to .67, as Hayes requested.
- 227. As another example, a series of electronic chats between March 12 and 17, 2008, demonstrates that Hayes caused UBS's Yen-LIBOR submission to move three (3) basis points over a five (5) day period. On Wednesday, March 12, 2008, Hayes asked Submitter-2 to raise the 3-month Yen-LIBOR submission from the previous day's .99 contribution, because "we have [\$2 million] usd fix in 3[month Yen-LIBOR] on Monday [March 17] per bp." Submitter-2 responded: "with yesterdays 99 i was already on the very high side. i need to go down a touch

lower on the back to what happened yesterday. . . thought about .97." Trader-1 responded: "cool no chance of .98? anyway the actual fix is Monady [sic] [March 17] so that's the key day." Although Submitter-2 had intended to drop his/her Yen-LIBOR contribution down to .97 on March 12, he instead raised his/her Yen-LIBOR submissions to .98. The following day, he raised it again to .99, and on Monday, March 17, the following exchange occurred:

Hayes: been chatting with [your supervisor] . . . can we go . . . high

3[month Yen-LIBOR] . . . obviously with the size of the fix today and confusion over levels if we could push it a bit more than usual

it would be great

Submitter-2: Friday fixed 3mt at 0.99

<u>Hayes</u>: thx [Submitter-2]

<u>Submitter-2</u>: shall I go fro [sic] 1%?

<u>Hayes</u>: pls

<u>Submitter-2</u>: ok will do

228. As promised, Submitter-2 contributed a Yen-LIBOR submission of 1% that day, three (3) basis points higher than where he had intended to submit a few days earlier.

229. In a March 28, 2008, electronic chat between Hayes and Submitter-2, Hayes was again successful in manipulating UBS's Yen-LIBOR submission to benefit his trading positions:

<u>Hayes</u>: just for my guide [Submitter-2] roughly wher are we going to set

3m and 6m?

<u>Submitter-2</u>: 3m0.92 6m 0.96

<u>Hayes</u>: can we go lower?

<u>Submitter-2</u>: sure . . . dont think it will be that low though . . . but can do 090

Hayes: so can we set 6m at .94 too? . . . 6m is much more urgent . . . most

urgent of the lot

Submitter-2: i just put in 0.95 for 6mt

Hayes: ok . . . Thx

- 230. True to his/her agreement to accommodate Hayes, Submitter-2 lowered UBS's 3-month Yen-LIBOR submission from .92 to .90, and lowered UBS's 6-month submission from .96 to .95.
- 231. On some occasions, UBS Yen-LIBOR submitters would also amend, if possible, previously submitted Yen-LIBOR contributions to accommodate UBS's trading positions. For example, in an April 4, 2008 electronic chat between Hayes and Submitter-2, the following exchange occurred:

<u>Hayes</u>: have you put the [Yen] libors in?

<u>Submitter-2</u>: y[es] . . . any changes?

<u>Hayes</u>: oh was going to ask high 6m if not too late

<u>Submitter-2</u>: i input 95 . . . which is on the lower side

<u>Hayes</u>: ok is it too late to change? . . . if not no drama

<u>Submitter-2</u>: i try to change it now but cannot gaurantee if it gets accepted

<u>Submitter-2</u>: just cannged [sic] it to 0.98

- 232. The UBS 6-month Yen-LIBOR submission that day was indeed .98, three (3) basis points higher than Submitter-2's originally intended submission.
- 233. As another example, on June 29, 2009, Hayes contacted Submitter-2 by electronic chat, explaining that he had huge positions that day and asking, "can we [submit] 6 mlibor high pls." Submitter-2 stated that based on the information he had, he would submit a 6-month Yen-

LIBOR of .7150. Hayes responded by asking, "can we go 74 or 75 [meaning .74 or .75] . . . we have [\$2 million per basis point exposure] for the next week." Submitter-2 agreed to accommodate this request, responding, "yes sure will. I go with .75 for you[.]" Thus, the submitter agreed to move his/her 6-month Yen-LIBOR submission by 3.5 basis points that day to benefit the derivatives trader's position.

- 234. From in or around 2007 through 2009, on some occasions, UBS Yen derivatives traders also requested that UBS Euroyen TIBOR submitters contribute Euroyen TIBOR submissions to benefit their Euroyen-based derivatives positions. The TIBOR submitters' manager, Submitter-1, routinely provided suggested TIBOR submissions based on the derivatives traders' positions, and the TIBOR submitters relied upon this input when making UBS' Euroyen TIBOR submissions.
- 235. For example, in a November 8, 2007 electronic chat, Submitter-1, who was also a UBS Yen derivatives trader, instructed the TIBOR submitter: "pls remind me tomorrow . . . we need to move the 1mos tibor up . . . maybe +2 tomorrow . . . then 1 bp on each for a few days . . . swap guys having some fixings." The TIBOR submitter responded "ok, noted".
- TIBOR submissions to decrease for a different improper purpose. On that day, Submitter-1 had the Euroyen TIBOR submitter drop UBS's 3-month TIBOR submission by four (4) basis points simply to damage Hayes's positions, and not because that is where he perceived Yen cash was trading. In an electronic chat with Trader-B at another Contributor Panel bank, Hayes explained how he would rectify the situation by manipulating TIBOR settings higher the following week: "[Submitter-1, who caused TIBOR to drop] hates me and is going to zurich . . . [his/her] last day

is Friday . . . so [s/he] tried to screw my pos[ition] . . . next week we have control . . . so will try to get it back up . . . or rather will do it . . . monday goes back up . . . "

237. Later that same day, in a separate electronic chat with an interdealer broker who handled transactions for Hayes ("Broker-A1"), Hayes described how he successfully reached out to the UBS TIBOR submitters to raise UBS's 3-month submission back up:

Hayes: main thing is 3m tibor . . . i went to meet the guys who set it today

Broker-A1: you can asist there

<u>Hayes</u>: they just set where we ask

Broker-A1: ;-) perfect

- i. <u>UBS Continued Its Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives after Hayes Left UBS for Defendant Citigroup.</u>
- 238. Traders on the UBS Yen Desk continued to manipulate Euroyen TIBOR, Yen-LIBOR, and the prices of Euroyen-based derivatives to benefit UBS's derivatives trading positions after Hayes left UBS in September 2009. These traders utilized some of the same methods—internal requests, use of interdealer brokers and coordination with other banks. At least one broker reached out shortly after Hayes's departure to assure a UBS Yen Derivatives Trader that he would continue to help UBS influence how the rates were submitted by other banks. For example, on September 10, 2009, UBS Yen Trader 2 reminded Derivatives Broker A1 at Broker Defendant ICAP that "Monday is the d-day" due to big fixes on swap transactions tied to three and six month LIBOR, both of which he needed low. Derivatives Broker A1, who by then was deeply experienced with the manipulative scheme, assured the Yen Trader 2 that they could influence the three-month fix, and that he stood ready to help:
 - "... you realise that you have the ability to influence the 3m fix, you are currently sitting at the upper end of the range. The 6m will have to come

down to others as you are already v low .. .i'll remind you to chase your cash boys as well:-)"

- 239. UBS Yen Trader 2 also reached out for help to Derivatives Broker B1 at Broker Defendant R.P. Martin, who similarly reassured him that he regularly spoke to at least seven other panel bank submitters and he would try to help Yen Trader 2, if he needed the help.
- 240. The UBS Yen Derivatives Traders, on their own and at the direction of the Yen Desk Manager, also continued to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives through UBS's submissions in order to manage Hayes's positions or to benefit other UBS Euroyen derivatives trading positions.

b. RBS.³⁹

- 241. From mid-2006 through late 2010, multiple RBS Yen traders and at least one manager attempted to manipulate Yen-LIBOR by making hundreds of manipulative requests of RBS's Primary Submitter and London-based traders, including RBS Yen Traders 1 and 2. At times, they were successful in manipulating Yen-LIBOR. RBS's Senior Yen Trader made most of the requests, but RBS's Yen Manager and other RBS Yen traders also made such requests. London-based Yen derivatives traders also made their own requests of RBS's Primary Submitter, both in person as they sat together, and through Bloomberg chats and other means. RBS's derivatives traders' requests for artificial Yen-LIBOR submissions were common and made openly on the trading floors in Asia and London. At times, at least one RBS manager was present when requests were made.
- 242. The requests were often accommodated by RBS's Primary Submitter and by RBS's backup submitters, including most often RBS Yen Trader 1 when he was the backup.

³⁹ *See also* Ex. B-4, pp. 8-18.

Yen derivatives traders' requests for beneficial submissions were usually for the most frequently traded tenors: one-month, three-month, and six-month. At times, the requests covered other tenors as well. Always seeking to maximize profit, the traders either asked for specific rates to be submitted or asked for a directional move, either higher or lower, in RBS's submissions. The requests were either for a particular day or for several days, and on some occasions, even weeks of submissions.

- 243. Starting as early as August 2006, a Yen derivatives trader employed by RBS Japan sent requests for favorable Yen-LIBOR submissions to a Yen derivatives trader in London, who in turn sometimes indicated he would seek accommodations from Submitter-1.
- 244. Starting in early 2007, RBS derivatives traders made more frequent requests for specific Yen-LIBOR submission in order to benefit their trading positions. This increase in 2007 began shortly after Trader-1 in Tokyo (who was employed by RBS Japan until December 2009) began working with Trader-2 in London on the Yen derivatives book, and Trader-3 joined the Yen derivatives swaps desk in London.
- 245. Trader-1 and Trader-2 would often discuss their need for Yen-LIBOR in a specific tenor to move in a particular direction on a specific day or over a period of days to benefit a Yen derivatives trading position, and Trader-2 generally would pass on the request to Submitter-1.
- 246. Trader-1 sometimes passed his requests through other money market traders. For example, in an electronic chat on May 3, 2007, Trader-1 asked a junior derivatives trader who acted as a backup Yen-LIBOR submitter, "can you do me a favour? ..can you drop a note to [Submitter-1] (JPY money mkt dealer) to set low lm and low 3m Yen-LIBOR today please? Thanks." The junior backup submitter responded, "just gave him a shout, said already on it..."

- 247. Trader-2 also served as a backup Yen-LIBOR submitter during times when Submitter-1 was away from the desk, and made Yen-LIBOR submissions to benefit derivatives trading books. Thus, for example, on August 20, 2007, Trader-1 noted in an electronic chat that "[Trader-2] is the one setting jpy [Yen] libor in london now ...for this week and next." The reason was that "[Submitter-1] is on leave." The next day, another Tokyo-based derivatives trader, Trader-4, asked "where's young [Trader-2] thinking of setting it?" Trader-2 responded, "where would you like it[,] libor that is[,] same as yesterday is call." Trader-4 said, "haha, glad you clarified! mixed feeling but mostly I'd like it all lower so the world starts to make a little more sense." Trader-1 then weighed in, observing that "the whole HF world will be kissing you instead of calling me if libor move lower." Trader-2 responded, "ok, i will move the curve down ...1 bp...maybe more...if i can." Trader-1 suggested that the time to move was not now: "maybe after tomorrow fixing hehehe." Trader-2 responded, "fine...will go with same as yesterday then."
- 248. At times, derivatives traders who had different trading books and conflicting interests in the direction of Yen-LIBOR competed for submissions. On March 27, 2008, for example, Trader-1 and Trader-2 expressed frustration that Trader-3, another Yen derivatives trader based in London, attempted to influence RBS's LIBOR submission. Trader-1 asked Trader-2, "we change the libor lower?," to which Trader-2 responded, "i was in a novation meeting and [Trader-3] asked [a junior Yen derivatives trader serving as a backup Yen-LIBOR submitter] to put it low." Trader-1 opined that "[Trader-3] shud have just [squared] it with us if he need it lower...cos i dont think they have as big position as us next few weeks...i dont think [Trader-3] or the long end guys shud ever touch the libor...they shd check with us." Trader-2 responded, "i know," and Trader-1 complained that "thats probably gonna cost us 200k gbp."

249. Later in the same March 27, 2008 electronic chat, Trader-1 and Trader-2 discussed their need to increase Yen-LIBOR the next day to benefit their trading position:

<u>Trader-1</u>: tomorrow we need to bump it [6-month LIBOR] way up

high .. highest among all if possible

* * * *

Trader-1: we need to bump up all the way in the 3mth libor tomorrow

as well

<u>Trader-2</u>: we will put it in tonmorrow morning and no one will touch

it i promise you.

250. The next day, RBS increased its 3-month Yen-LIBOR submission by three basis points, making it the second-highest submission, and increased its 6-month submission by five basis points, making it the third-highest submission.

- 251. On at least one occasion, an RBS Yen derivatives trader recognized that it might be necessary to have an excuse for manipulating RBS's Yen-LIBOR contributions that day. On August 28, 2008, Trader-2 asked Trader-1, "where shall we put libors." Trader-1 responded, "high 3m ... low 6m." They then discussed the 1-month LIBOR submission. Trader 2 said, "1s?", to which Trader-1 responded: "low . . . so we dont need to change 1 today . . . pretend we forgot . . .we can change it tomorrow . . . assuming no one else in bank has any position in 1s." RBS kept its 1-month Yen-LIBOR submission unchanged that day, tying it for the third lowest of all Contributor Panel Banks. And, consistent with Trader-1's request, RBS's 3-month Yen-LIBOR submission increased by two basis points, and its 6-month Yen-LIBOR submission declined by one basis point.
- 252. Trader-1 and Trader-2 on occasion passed their requests to Submitter-1 for Yen-LIBOR contribution levels through a junior derivatives trader, Trader-5, who worked on the Yen desk in London under Trader-2. For example, on April 24, 2009, Trader-5 asked Submitter-1,

"Can we go with high 3s and high 6s plz today." Submitter-1 responded, "they are lookingh bit softer, but will try and keep ours unch." Trader-5 responded, "thnx." RBS's 3-month and 6-month Yen-LIBOR submissions on that day were unchanged from the day before, and both were above the actual Yen-LIBOR fix.

253. On another occasion, in an electronic chat on September 23, 2009, Trader-1 said to Trader-5, "hey... can you ask [Submitter-1] if he can lower his 3mth Libor by 1 bp today? and everything else unchange." Trader-5 responded, "yes," then "asking," and finally, "agreed." On that day, RBS lowered its 3-month Yen-LIBOR submission one basis point compared to the previous day.

254. On another occasion, on April 22, 2009, Trader-2 asked Submitter-1 in an electronic chat, "can we push up 6m again pls?" Submitter-1 responded, "ok will try." Trader-2 then asked, "what do you think we can go for?," to which Submitter-1 responded, "77." That day, RBS's 6-month Yen-LIBOR submission increased by one basis point to 0.77, making RBS the highest submitter among the eight banks included in that day's Yen-LIBOR fixing. RBS also had increased this submission one basis point on the previous day.

255. Requests for favorable Yen-LIBOR submissions were often treated in a routine, even casual, manner. One example is a May 20, 2009 exchange in an electronic chat involving Trader-2 and Submitter-1, among others:

<u>Trader-2</u>: high 3s and low 6s pls [Submitter-1]

<u>Submitter-1</u>: no problems

<u>Trader-2</u>: grazias amigo . . . where will you lower 6s to?

Submitter-1: 70

⁴⁰ In the context of the RBS chats, "unch" appears to mean that the LIBOR would be unchanged from the previous day.

- 256. RBS's 6-month Yen-LIBOR submission on May 20th dropped two (2) basis points from 0.72 (where it had been the preceding two days) to 0.70, and on the following two days it reverted to 0.72.
- 257. A second example is an electronic chat dated September 15, 2009, in which Trader-2 asked, "can we lower our fixings today please [Submitter-1]." Submitter-1 responded, "make your mind up," then "haha, yes no probs." Trader-2 stated, "im like a whores drawers." RBS lowered its 3-month and 6-month Yen-LIBOR submissions on that day, and kept its 1-month submission the same.
- 258. The requests from Trader-1 and Trader-2 continued throughout 2010. For example, on July 20, 2010, Trader-1, in an electronic chat with Trader-2, asked, "can you ask [Submitter-1] to set 6m JPY higher today? 45 would be good..." Trader-2 responded, "yes i did" and "he will bump it up a point." On that day, RBS's 6-month Yen-LIBOR submission increased from 0.44 to 0.45.
- 259. By at least September 2010, certain RBS Yen derivatives traders became aware of a prohibition on communicating about requests for LIBOR submissions. On September 24, 2010, in an electronic chat involving Trader-1, Trader-2, and Trader-5, among others, Trader-1 initiated a request by stating, "hey [Trader-2], can you ask [Submitter-1] to push 6m Yen-LIBOR up 2 bps to 44." Trader-2 responded, "ha . . . i will mention it ... no emails anymore . . . after tom." ⁴¹ Trader-1 replied, "haha...i heard he called up BBA to ask them to change the way they fix the libor."

⁴¹ The context of the remainder of the electronic chat suggests this is a reference to former UBS Senior Yen Trader Hayes.

260. A month later, on October 28, 2010, Trader-1, in an electronic chat with Trader-2, indicated that he would make his request orally rather than in an electronic communication "after the tomhayes thing":

<u>Trader-1</u>: it would help if [Submitter-1] hike up 1 bp today

Trader-2: i try, after the tomhayes thing its more difficult . . . i feel

the more i ask the more he wont . . . out of principal

<u>Trader-1</u>: true

<u>Trader-2</u>: cos i cant type it on chat anymore . . . i have to walk over

261. In a November 22, 2010, electronic chat, Trader-1 and Trader-2 discussed their view that they should take over submitting Yen-LIBOR on behalf of RBS:

<u>Trader-1</u>: actually we shd just take over the libor setting

Trader-2: hahaha

Trader-1: doesnt make sense for him [Submitter-1] cuz he doesnt

have any risk

<u>Trader-2</u>: i agree

Trader-1: [A manager in Singapore] question today why [Submitter-

1] sets it when he doesnt even have any risk

Trader-2: but libor i guess technically isnt meant to be set by risk

takers

Trader-1: yes but why give it away the advantage?

262. Earlier in that same electronic chat, Trader-1 and Trader-2 indicated they were aware that LIBOR was coming under scrutiny, yet they continued to discuss how Yen-LIBOR levels could be manipulated for their benefit:

Trader-1: hey ... you think we be able to convince [Submitter-1] to

change the libor today?

Trader-2: i can try

<u>Trader-1</u>: need to drop 3mth Libor and hike 6m Libor

Trader-1: he dropped 6m by 2 bps last friday

Trader-2: at the moment the FED are all over us about libors

Trader-1: thats for the USD?

<u>Trader-2</u>: yers

<u>Trader-1</u>: dun think anyone cares the Yen-LIBOR

Trader-2: **not yet**

(Emphasis added).

263. In 2010, after RBS began an investigation into U.S. Dollar LIBOR reporting practices in response to inquiries from governmental authorities, the head of money market trading in London instructed other money market traders that they were not to accept requests for LIBOR submissions from derivatives traders. Nonetheless, on November 24, 2010, after Trader-1 sent an electronic message to Submitter-1 asking to increase the 6-month Yen-LIBOR submission to suit a trading position, Submitter-1 called Trader-1 and stated that "we are not allowed to have those conversations on Mindalign [RBS's Internal Electronic Chat System]." Trader-1 referenced "the BBA thing," after which Submitter-1 stated, "leave it with me and, uh, it won't be a problem. . ." Trader-1 responded, "ok, great."

c. Rabobank.⁴²

264. For nearly six years, from at least mid-2005 through at least early 2011,
Rabobank, through its submitters and traders, frequently attempted to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives and consistently made false submissions in

⁴² See also Ex. D-2, pp. 12-20, 24-33.

furtherance of those attempts. At times, Rabobank successfully manipulated Yen-LIBOR. Several Rabobank traders transmitted hundreds of internal requests to its Yen-LIBOR submitters for preferential (false) LIBOR submissions to benefit the traders' (and Rabobank's) LIBOR-based trading positions. The submitters accommodated those requests on a regular basis and certain submitters also took into account their own trading positions when making LIBOR submissions.

- 265. For example, on October 11, 2006, a Yen-LIBOR trader ("Trader-4") emailed Rabobank's Yen-LIBOR submitter ("Submitter-4") with the subject line: "3mths." In the email, Trader-4 wrote: "If in 2 minds on 3mth yen libor today, prefer u to go higher rather than lower mate if you've got ntg in it." Submitter-4 replied: "no prob mate...what u want me to set mate 43?....44?" Trader-4 wrote back: "0.44 if you can keep a straight face.." Submitter-4 responded: "no prob mate 44 it is!" That day, as requested, Rabobank's 3-month Yen-LIBOR submission was 0.44, an increase of one basis point. Rabobank's submission went from being tied as the fifth highest submission on the Contributor Panel on the previous day to being tied as the second highest submission on the Contributor Panel.
- Yen-LIBOR submitter ("Submitter-5) with the subject line: "libors." In the email, Trader-4 wrote: "I have a few chunky rolls in the 3 mth yen libors in the next few days. I don't want to compromise your integrity., but if you've got ntg in it maybe a smidge lower today (actually shud be anyway as futures are a abt 1 higher anyway) and then high for Thurs and Fri would be great then I will be back in my box for another 2 weeks." Submitter-5 responded: "sure no problem mate if you have a sec can i have the lvls plse." That day, Rabobank's 3-month Yen-LIBOR submission was consistent with Trader-4's request, decreasing one basis point from 0.45

to 0.44, whereas the rest of the Contributor Panel stayed approximately the same on average. Rabobank's submission went from being tied as the fourth highest submission on the Contributor Panel on the previous day to being tied as the twelfth highest submission on the Contributor Panel. On the next day, Thursday, October 26, 2006, Rabobank's contribution was again consistent with Trader-4's request, increasing one (1) basis point, from 0.44 to 0.45, whereas the rest of the Contributor Panel either remained unchanged or decreased their submissions. Rabobank's submission went from being tied as the twelfth highest submission on the Contributor Panel to being tied as the second highest submission on the Contributor Panel. The next day, Friday, October 27, 2006, Rabobank's contribution was again consistent with Trader-4's request, remaining at 0.45, whereas the rest of the Contributor Panel decreased its submissions by an average of approximately half a basis point. Rabobank's submission remained tied as the second highest submission on the Contributor Panel.

267. Two weeks later, on November 8, 2006, Trader-4 wrote to Submitter-4: "Got a few big 3mth fixings in next 2 days, any chance you cud bump it up a couple? What do u actually think 3mth today 45.25-45.5 ish?" Submitter-4 wrote back: "will set them high and dry skip!" The next day, Trader-4 wrote back: "Thx skip, 1 more today - only has to be 3 mths, others do as you pls, then im relatively square for a while.." Submitter-4 replied: "no prob mate will set it high again...is 46 lvl ok or higher?" On both days, Rabobank's 3-month Yen-LIBOR submissions were consistent with Trader-4's request. On November 8, 2006, Rabobank's submission was 0.46, an increase of three (3) basis points from the previous day's submission, whereas the rest of the Contributor Panel stayed approximately the same on average.

Rabobank's submission went from being tied as the second lowest submission on the Contributor Panel on the previous day to being tied as the third highest submission on the Contributor Panel.

On November 9, 2006, Rabobank's submission was again 0.46, keeping Rabobank's submission tied as the third highest submission on the Contributor Panel.

268. Requests were regularly accommodated by multiple Yen-LIBOR submitters on the desk, and when one submitter on the desk was out, swaps traders knew to make their requests to substitute submitters to ensure that their requests would be accommodated. For example, on February 9, 2007, Trader-4 emailed Submitter-4 with the subject line: "3 mth libors." In the message, Trader-4 wrote: "Mate, be great if you could keep your 3 mth libor unchanged today if you can get away with it and its ok with your posy." Submitter-4 replied: "you need a high one? no prob skip." Trader-4 wrote back: "Yes pls mate, my only major fixing for a while, cheers." Submitter-4 replied: "off next week mate so if u need any libor requests next week -give [Submitter-5] a shout." That day, as requested, Rabobank's 3-month Yen-LIBOR submission was 0.55, the same as the previous day, tied as the highest submission on the Contributor Panel. The next week, on February 14, 2007, Trader-4 wrote to Submitter-5 with the subject line "6m yen libor," and asked: "Can you keep your 6m yen libor at 0.62 today if poss as have a large fixing today?" Submitter-5 wrote back: "sure will do mate." That day, as requested, Rabobank's 6-month Yen-LIBOR submission remained at 0.62. Rabobank's submission went from being tied as the third highest submission on the Contributor Panel on the previous day to being the highest submission on the Contributor Panel.

269. In addition to accommodating swaps trader requests, Rabobank Yen-LIBOR submitters also took their own Euroyen-based derivatives trading positions into account. When multiple Rabobank swaps traders had trading positions that conflicted with each other, submitters had to balance competing requests. For example, on Monday, March 26, 2007, Trader-4 emailed Submitter-4: "On libors, this week have a fair bit of 6mths rolling off, I am

short so if you can discreetly drop your 6m by 1-2 bp without any trouble would be great - if not no probs mate" and "Im happy for you to keep your 1 mth high as both [another Yen swaps trader ("Trader-5")] and I are long a fair bit of those till Wed." Submitter-4 wrote back: "sure no prob - all my stuff is mainly 1 mth so will keep that high and drop 6's cheers." On Tuesday, March 27, 2007, as requested, Rabobank's 6-month Yen-LIBOR submission decreased two basis points, from 0.74 to 0.72. Rabobank's submission went from being tied as the second highest submission on the Contributor Panel on the previous day to being tied as the eighth highest submission on the Contributor Panel. Likewise, Rabobank's 1-month Yen-LIBOR submission decreased three (3) basis points, whereas the other panel banks' submissions decreased by approximately four and three-quarters (4-3/4) basis points on average. As a result, Rabobank's submission went from being tied as the second highest submission on the Contributor Panel on the previous day to being tied as the highest submission on the Contributor Panel.

270. Rabobank's Yen-LIBOR submitters accommodated swaps traders' requests to the point of allowing the swaps traders significant influence over the setting process, particularly Trader-5, who made regular requests to Rabobank's London-based Yen setters. For example, on August 21, 2007, Trader-5 emailed Submitter-5 with the subject line "LIBORS" and asked: "If you can make 1 month LIBOR higher today, that would be a help mate." Submitter-5 replied: "Ok what level you looking at?" Trader-5 wrote back: "If possible, woud prefer it to be 0.82%." Submitter-5 wrote back: "Ok mate will do." Trader-5 then wrote: "Thank you for help mate. What do you guess tdy's 3m ad 6m yen libors? Higher or lower?" Submitter-5 responded: "Hahah you tell me I m not really watching the yen libors all my stuff going a bit mad at mom." Trader-5 later asked: "Where are you setting 3mth and 6mth libor today?" Submitter-5 repeated: "You tell me what you want mate he has no fixing at mom." Trader-5 responded: "Im 0.82,"

"3m 1.00," "6m 1.06:" "If you can put those rates...would be nice mate." Submitter-5 then offered: "Great will do if you want to give me them each day ill input whatever you want mate ok cheers." (Emphasis added). That day, as requested, Rabobank's 1-month Yen-LIBOR submission was 0.82, an increase of four (4) basis points. Rabobank's submission went from being tied as the eleventh highest submission on the Contributor Panel on the previous day to being tied as the second highest submission on the Contributor Panel. Likewise, as requested, Rabobank's 3-month Yen-LIBOR submission was 1.00, and its 6-month Yen-LIBOR submission was 1.06.

- 271. As another example, on August 24, 2007, Trader-5 emailed Submitter-5 with the subject line "libors" and stated: "I would like today's 6m libor lower today mate," to which Submitter-5 replied: "Ok mate what level do you want mate." Later that day, Trader-5 emailed Submitter-5 again and asked: "What rate did you input for libors?" Submitter-5 responded: "Himmate I have not done them what do u want." Trader-5 wrote back: "1m 0.78," "3m 0.99," "6m 1.00." Later that day, after the Yen-LIBOR submissions and fixing had been published, Trader-5 replied again: "Ops... Sorry that I meant 6m is 1.10.... Not 1.00%. Just bit surprised when I saw our 6m libor price." That day, as requested, Rabobank's 1-month Yen-LIBOR submission was 0.78, and its 3-month Yen-LIBOR submission was 0.99. Rabobank's 6-month Yen-LIBOR submission was 1.00, consistent with Trader-5's mistaken request, a fifteen (15) basis point decrease from the previous day's submission, whereas the other panel banks' submissions decreased by approximately half a basis point on average.
- 272. Rabobank's Yen-LIBOR submitters knew their Yen-LIBOR submissions were false. For example, on September 21, 2007, Trader-5 emailed Submitter-4 with the subject line "libors," writing: "Wehre do you think today's libors are? If you can, I would like lmth libors

higher today." Submitter-4 replied: "Bookies reckon lm sets at .85." Trader-5 wrote back: "I have some fixings in 1 mth so would appreciate if you can put it higher mate." Submitter-4 replied: "No prob mate let me know your level." Trader-5 responded: "Wud be nice if you could put 0.90% for lmth cheers." Submitter-4 wrote back: "Sure no prob. I'll probably get a few phone calls but no worries mate!" Trader-5 replied: "If you may get a few phone calls then put 0.88% then." Submitter-4 responded: "Don't worry mate – there's bigger crooks in the market than us guys!" (Emphasis added). That day, as requested, Rabobank's 1-month Yen-LIBOR submission was 0.90, an increase of seven basis points from its previous submission, whereas the other panel banks' submissions decreased by approximately a half (1/2) of a basis point on average. Rabobank's submission went from being tied as the tenth highest submission on the Contributor Panel on the previous day to being the highest submission on the Contributor Panel.

- 273. Similarly, on October 17, 2008, Trader-5 emailed Submitter-4, and asked: "If possible, could you keep setting 6m libor at 0.80% for a while please?" Submitter-4 wrote back: "Hi mate oh yes we are now setting all libors significantly under the market levels."
- 274. On March 19, 2008, Trader-5 emailed Submitter-4 with the subject line "LIBORs," and wrote: "We have loads of 6mth fixings today. If possible, could you set 6m libor to 1.10% please? We don't have particular interest in other libors." Submitter-4 wrote back: "Sry just to confirm 6m you want at 1.10??? Ok will do that but I will prob get a phone call at I set 02 yesterday and brokers reckon everything a little lower today," continuing: "But will set your level cheers." Trader-5 wrote back: "Actually...[another Yen Trader and Trader-5's supervisor ("Trader-6")] would like 6m to be higher today.... If it is not appropriate, it is fine mate, I will explain the situation to him. He will understand the situation. He is on holiday

today. He just called me up in this morning to ask you to put libors higher." Submitter-4 replied: "Well its no prob mate -1 can set it that high, it will be quite funny to see the reaction!" (Emphasis added). Trader-5 wrote back: "I felt that it was a little funny so...if you can put a little higher 6mth up to the lvl you feel comfortable, lbp or a couple of bp would be fine for him mate." Submitter-4 wrote back: "No worres mate - I'll set it at 1.10..." That day, as requested, Rabobank's 6-month Yen-LIBOR submission was 1.10, an increase of eight basis points from its previous submission of 1.02, whereas the other panel banks' submissions decreased by approximately a third of a basis point on average. Rabobank's submission went from being tied as the tenth highest submission on the Contributor Panel on the previous day to being the second highest submission on the Contributor Panel.

- 275. Submitter-3, who supervised the Yen-LIBOR submitters in addition to the U.S. Dollar LIBOR submitters, was aware of the conduct on the desk he supervised and played an active role in it. As an example, on March 14, 2007, Trader-4 messaged Submitter-3 and asked: "Is [Submitter-5] in mate?" Submitter-3 replied: "Not yet," and asked: "can I help?" Trader-4 wrote back: "No worries mate, I think [Submitter-4] just wanted him to nudge up a few of the LIBORs.. Will send him a mail." Submitter-3 replied: "Ok cc [additional individual] and [Submitter-1] on it aswell mate, just in case." Trader-4 replied: "I got hold opf [Submitter-5] mate and he said all in hand, cheers."
- 276. In January 2009, new submitters took responsibility for setting LIBOR with limited knowledge of the process and without training. As a result, Trader-5 began to exercise even more control over the LIBOR setting process. As an example, on January 28, 2009, Trader-5 emailed the new Yen-LIBOR submitter ("Submitter-6"): "Could you set todays libors,,,3mth at 0.65% 6mth at 0.83% pls?" Later, Trader-5 emailed Submitter-6 again: "If you haven't set 6m

libor yet,,, could you set it at 0.82% instead of 0.83% pls? 3mth is ok with 0.65%o." That day, as requested, Rabobank's 3-month Yen-LIBOR was 0.65. Likewise, as requested, Rabobank's 6-month Yen-LIBOR submission was 0.82, a decrease of eight basis points from its previous submission, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the fourth highest submission on the Contributor Panel on the previous day to being tied as the eleventh highest submission on the Contributor Panel.

- 277. After January 2009, Trader-5 would frequently send an entire slate of LIBOR rates to the submitters for them to input. For instance, on February 25, 2009, Trader-5 wrote to Submitter-6 with the subject line "libors" and wrote: "Could you set libors for today as below please?": "1m 0.39;" "2m 0.60;" "3m 0.65;" "4m 0.71;" "5m 0.76;" "6m 0.80." The next day, he wrote again to Submitter-6 with the subject line "libors" and wrote: "Could you put the below libors for today pls?": "lm 0.55%;" "2m 0.60%;" "3m 0.65%;" "4m 0.71%;" "5m 0.76%;" "6m 0.80%." On both days, Rabobank's Yen-LIBOR submissions were made as requested.
- 278. Submitters would often seek out Trader-5's input in the setting process. For instance on January 30, 2009, Submitter-6 messaged Trader-5: "any preferences in fixings today?" Trader-5 wrote back: "6m 0.82% pls," to which Submitter-6 responded: "will do." That day, as requested, Rabobank's 6-month Yen-LIBOR submission was 0.82, a decrease of three basis points from its previous submission, whereas the other panel banks' submissions decreased by approximately a basis point on average. Rabobank's submission went from being tied as the eighth highest submission on the Contributor Panel on the previous day to being the eleventh highest submission on the Contributor Panel.

- 279. Trader-5 monitored Rabobank's Yen-LIBOR submissions and would follow up with the submitters on the occasions when their submissions strayed from his requests. 'For example, on January 30, 2009, Trader-5 emailed Submitter-6 and wrote: "Why did you moved up 3m libor by 10.5bp? It is ridiculous." Submitter-6 wrote back: "had again problems with publishing from my sheet," "Wrong figure came across by putting in manual adjustments," "Gonna automatize it today." Trader-5 wrote back: "3m libor could have been below 0.67 if we, Rabo, didn't moved up by 10.5bp!" Submitter-6 responded: "They didn't call from reuters why we were 10.5 tics out which they should have done," continuing: "And they take the outliers out of their calculations, so the 76.5 price shouldn't be included." Trader-5 explained: "If we have stayed at 0.66% instead of 0.765, then the 3mth libor should have been 0.668125% instead of 0.67063%. so it is below 0.67%."
- 280. On October 18, 2010, Trader-5 emailed Submitter-6's replacement as the Yen-LIBOR submitter ("Submitter-8") and wrote: "Why did you put all the Yen-LIBORs higher for today without telling me? Where is the team play? You know my position is? I cant believe you did this without telling me. If you had to put them higher for some reason but at least you could have told me in before hand. Im really fukked." (Emphasis added). At around the same time, Trader-5 messaged Submitter-8: "why did you put libors all higher?" Submitter-8 wrote back: "Hi made I just saw your email and replied.. I fukked up., you gave [the new back-up Yen-LIBOR submitter ("Submitter-7")] new libors last week., didn't save the sheet and today I used my own computer for libors.. I fukked up, my mistake., not on perpose mate," "I am really sorry," "And I would never change libors without consulting you." Trader-5 messaged back: "i got so surprised when i saw rabos number, you know my position then put libors

higher," explaining: "some ppl react in this way so i worried as well if you were this kind of a guy."

- Rabobank's Yen-LIBOR submission was to affect the final Yen-LIBOR fix. For example, on January 29, 2009, Submitter-6 messaged Trader-5 and wrote: "saw the 6m vs 3m basis collapsing last night.." Trader-5 wrote back: "because we lowered 6m libor!" Submitter-6 responded: "heheh absolutely., it comes ur way i presume," and later: "preferences in the fixing today?" On October 20, 2010, Submitter-8 chatted with Trader-5, writing: "so whats the reason that you dont put down Rabo Yen libor numbers? just one tick to see what happens? Or is that sort of manipulation and not done? or am I saying something stupid now?" Trader-5 responded: "Rabo Yen-LIBOR numbers are already one of the lowest four banks among 16 panel banks so even if we put them lower further, it wouldnt give any change on yen libors," to which Submitter-8 replied: "I see.." Trader-5 then wrote: "and i think just keep libors one of the lowest four banks is the good, idea because it isnt obvious so that ppl wouldnt notice, **if it is too obvious, ppl could start looking at us manipulating libors.**" (Emphasis added).
- 282. Trader-5 had almost complete control over the Yen-LIBOR setting process at Rabobank after Rabobank's LIBOR submitters moved to Utrecht in January 2009. For instance, on August 4, 2009, Trader-5 asked Submitter-7: "have you put todays libors?" Submitter-7 wrote back: "nope you can set them if you like." Trader-5 wrote back: "just sent it out now. thank you." On June 12, 2009, Trader-5 messaged Submitter-7: "i sent a email about LIBORs... did you get it?" Submitter-7 wrote back: "i will input them," to which Trader-5 responded: "thank you for your help!" In fact, Trader-5's control of the process was so significant that after Rabobank prohibited swaps traders from communicating about LIBOR rate setting with

submitters on November 30, 2010, Trader-5 explained to a broker: "Till two weeks ago I was seting libors for rabo but due to BBA investigation someone out side of europe shudnt have any influence of libors then I cudnt be involved in libors after then."

283. Trader-5's own supervisor, and the head of Rabobank's Yen derivatives desk in Tokyo, Trader-6, was also aware of and intimately involved in Trader-5's conduct, directing requests to submitters through Trader-5 to benefit Trader-6's trading positions. For example, on October 8, 2008, Trader-5 emailed Submitter-4 with the subject line "Todays libors..." writing: "If is it ok,,, [Trader-6] would like todays 6m libor at 1.10%. Thank you very much for help." Submitter-4 wrote back: "Ok skip." That day, as requested, Rabobank's 6-month Yen-LIBOR submission was 1.10, a decrease of ten (10) basis points from its previous submission, whereas the other panel banks' submissions increased by approximately one and three-quarters (1-3/4) basis points on average. Rabobank's submission went from being tied as the fifth highest submission on the Contributor Panel on the previous day to being tied as the twelfth highest submission on the Contributor Panel.

284. Likewise, on July 24, 2008, Trader-5 wrote to Submitter-4: "As for the today's libors. Could you set 6m at 0.97% please? [Trader-6] has big fixings over the next couple of weeks so that it would be nice if you could keep it as low as possible for some time." Submitter-4 responded: "Will do mate." That day, as requested, Rabobank's 6-month Yen-LIBOR submission was 0.97, a decrease of three (3) basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the sixth lowest submission on the Contributor Panel on the previous day to being tied as the second lowest submission on the Contributor Panel.

⁴³ Even after Trader-5 was instructed not to influence Rabobank's Yen-LIBOR submissions, on occasion he accepted solicitations by brokers to attempt to influence Yen-LIBOR submissions at other Contributor Panel Banks.

- 285. In a call on July 25, 2008, Trader-6 told a third party at another financial institution: "Sometimes if you want the LIBOR to be set, if you want today's LIBOR at a certain price, your desired number [would be achieved]." After the third party replied: "Really?" Trader-6 explained: "Well, we are the ones who set [the LIBOR]." Trader-6 continued: "The recent 97 had been set at 97 due to my wishes," explaining: "That is obviously ... that's a little bad ... Well, anyway, the person with the strongest wishes gets to decide it [LIBOR]. Well, this is the way it is." (Emphasis added).
- 286. On occasion, other traders on Trader-6's desk made requests when Trader-5 was absent. On May 25, 2009, Submitter-6 forwarded Trader-5's out-of-office message to the junior trader on Trader-5's desk ("Trader-8"). Trader-8 wrote back: "What can I help you ??" Submitter-6 responded: "Normally [Trader-5] sends us his preferences for the JPY [Yen] libors. If you have any let me know." Trader-8 wrote back: "We don't have any special requests for libors today." The next day, Trader-8 replied again: "About libors.. Same as last Friday pls. if no particular int from others."
- 287. On occasion, Trader-6 also made requests directly to Rabobank's Yen-LIBOR submitters. For example, on August 4, 2008, Trader-6 messaged Submitter-4: "Please set today's 6mth LIBOR at 0.96," continuing: "I have chunky fixing.... Thanks for your help," to which Submitter-4 replied: "No worries mate." That day, as requested, Rabobank's 6-month Yen-LIBOR submission was 0.96, a decrease of three basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the fourth lowest submission on the Contributor Panel on the previous day to being the second lowest submission on the Contributor Panel. Two days later, on August 6, 2008, Trader-6 messaged Submitter-4 again: "I have another side of fixing today and tomorrow,"

continuing: "can we make 6mth LIBOR at 0.98?" Submitter-4 wrote back: "Ok higher?...sure thing." Trader-6 responded: "Yes, only today and tomorrow...thanks." That day, Rabobank's 6-month Yen-LIBOR submission was even higher than requested, 1.00, an increase of four basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being the second lowest submission on the Contributor Panel on the previous day to being tied as the fourth highest submission on the Contributor Panel. Rabobank's submission the next day remained the same, as did its submission's place on the Contributor Panel.

- 288. On Friday, August 8, 2008, Trader-6 messaged Submitter-4 again: "Could you make it 6mth LIBOR at 0.97 today," explaining: "I have big fixing coming two weeks...." That day, as requested, Rabobank's 6-month Yen-LIBOR submission was 0.97, a decrease of three (3) basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the fourth highest submission on the Contributor Panel on the previous day to being tied as the second lowest submission on the Contributor Panel. Rabobank's submission remained the same on Monday, August 11, 2008, Tuesday, August 12, 2008, and Wednesday, August 13, 2008.
- 289. On August 14, 2008, Trader-6 messaged Submitter-4 yet again and wrote: "Today and 19th Aug are the biggest fixing for us. Could you set 6m LIBOR at 0.93 today." That day, Rabobank's 6-month Yen-LIBOR submission was 0.94, a decrease of three (3) basis points, whereas the other panel banks' submissions stayed approximately constant on average. Rabobank's submission went from being tied as the seventh lowest submission on the Contributor Panel on the previous day to being tied as the second lowest submission on the

Contributor Panel. On August 19, 2008, Rabobank's 6-month Yen-LIBOR submission was 0.93, making it tied as the lowest submission on the Contributor Panel.

- 290. Other Rabobank traders continued to make requests as well. For instance, on June 25, 2009, another Yen trader ("Trader-7") emailed Submitter-7 and wrote: "could you set input for the Yen 6M libor very low today (65 or so). We have a very large fixing today in the 6 month's." That day, as requested, Rabobank's 6-month Yen-LIBOR submission was 0.65, a decrease of six basis points from its previous submission, whereas the other panel banks' submissions decreased by approximately a basis point on average. Rabobank's submission went from being tied as the eighth lowest submission on the Contributor Panel on the previous day to being tied as the second lowest submission on the Contributor Panel.
- 291. Traders and submitters did not hide the fact that traders had influence over the Yen-LIBOR submission process from their supervisors. The Head of Liquidity and Finance for Europe, and later Submitter-3's replacement as Global Head of Liquidity and Finance ("Trader-9"), was informed that Trader-5 would sometimes email the Yen-LIBOR submitter with requests. On December 9, 2008, Trader-9 emailed Submitter-3 and Submitter-5 with the subject line: "LIBORS." In the email, Trader-9 wrote: "Good to hear that [Submitter-8] is up and running. Short question: only question mark for me is him sending out the daily Rabo Libor fixings. He told me that he will just 'copy, paste' the previous days Libors. Don't blame [Submitter-8] of course, but he has got no clue on this yet. What you think, is this going ok? Want to prevent that we get questions from BBA on this?" Submitter-5 replied: "Yes [Submitter-8] is doing fine, regarding the libors," explaining that with: "the yen libors sometimes [Trader-5] will email from Tokyo to ask for any special requests."

292. In March 2009, when Rabobank conducted an operational audit of the Money Markets desks, the auditor, after meeting with Submitter-6, wrote in her work papers that: "Submitter-6 also inputs the Yen-Libor rates on behalf of the Tokyo team to the BBA as they have no access to do this. They provide this via email." Within her work papers, the auditor included an email from Trader-5 to Submitter-6 in which Trader-5 sent LIBOR rates to Submitter-6 for submission.

d. Barclays.

293. From at least as early as August 2006 through approximately January 2007, then on another occasion in approximately June 2009, Barclays Yen swaps traders made requests for favorable Yen-LIBOR submissions to Barclays Yen-LIBOR submitters in order to benefit Barclays and the Barclays' derivatives traders' Euroyen-based derivatives positions. Barclays' Yen-LIBOR submitters accommodated the requests on some occasions. Specifically, between August 2006 and June 2009, the FCA (formerly FSA) determined that Barclays' derivatives traders made at least 26 requests to manipulate Barclays' Yen-LIBOR submissions.

e. Lloyds.

294. Over a periods of three years, from 2006 to 2009, Lloyds' Yen-LIBOR trader-submitter "routinely" made Yen-LIBOR submissions designed to benefit the positions of traders at Lloyds and other institutions. Lloyds' manipulation of LIBOR manipulation, including Yen-LIBOR manipulation was known among its traders, and involved at least twelve individuals, including four managers. Multiple submissions of Yen-LIBOR were manipulated, including at least one occasion in which a Lloyds trader not on the Money Market Desk made a request for a "low 3s" Yen-LIBOR submission, which Lloyds' trader-submitter factored in when making the bank's Yen-LIBOR submission to Thomson Reuters.

f. Deutsche Bank

295. From 2005 through 2011, approximately twenty-nine Deutsche Bank employees, including senior management, derivative traders, and submitters, manipulated Yen-LIBOR and Euroyen TIBOR from various offices, including New York, London, Frankfurt, and Tokyo. 44 DB Group Services employed all of Deutsche Bank's Euroyen-based derivatives traders and pool traders that were located in London. Because Deutsche Bank's MMD and pool traders sat at the same GFFX desk, the traders were able to orally communicate favorable requests, as well as execute written requests, which were regularly taken into account by Deutsche Bank's submitters. 45 Deutsche Bank's submitters also openly solicited requests from traders to confirm that their false submissions would not be harmful to the traders' respective Euroyen-based derivatives positions. 46 This practice was well-known, with Trader-11 telling another trader: "ON JPY WE TRY TO HAVE OUT LIBORS WITH OUR POSITIONS NOT AGAINS[T]."

296. Deutsche Bank was successful in manipulating Yen-LIBOR and Euroyen TIBOR. For example, over the course of two successive days, Derivatives Trader B and Submitter A manipulated one-month Yen-LIBOR higher and then lowered it the very next day:

April 4, 2006:

Deutsche Bank Derivatives

Trader B: ... could u set 1m at 8bps [0.08] pls? thanks

<u>Deutsche Bank Submitter A</u>: done mate

April 5, 2006:

Deutsche Bank Derivatives

⁴⁴ Deutsche Bank NYSDFS Consent Order at 4.

⁴⁵ Ex. I-2 at 23.

⁴⁶ Ex. I-2 at 23.

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Trader B: Thanks mate... the 1m back to 7bps [0.07]

today pls

affirmative⁴⁷ Deutsche Bank Submitter A:

On each of these days, Deutsche Bank's one-month Yen-LIBOR submissions exactly

matched Derivatives Trader B's request. 48

297. In another example, Submitter-3's Euroyen-based derivatives positions were to

reset or mature, he requested that Submitter-8 make a false Yen-LIBOR submission to benefit

his trading book:

May 2<u>2, 2006</u>:

Deutsche Bank Submitter-3: I've got a 3m jpy libor pay set today, could you go

in low if it suits? thx

Deutsche Bank Submitter-8: YES SURE⁴⁹

g. Merrill Lynch

During the Class Period, Merrill Lynch colluded with UBS Senior Yen Trader, 298.

Tom Hayes, and Terry Farr, an R.P. Martin broker that worked with Hayes to manipulate Yen-

LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. During Hayes' criminal

trial in London, a June 16, 2008 communication was disclosed where Hayes asked Farr to reach

out to Alexis Stenfors, a senior proprietary trader at Merrill Lynch's short-term interest rate desk,

to ask Stenfors wash trade of a "chunk" of Euroyen-based derivatives, the commission on which

would compensate Farr for assisting Hayes in manipulating Yen-LIBOR and Euroyen TIBOR.

Farr agreed, stating "Thanks mate appreciate and i will ask him when he gets in." ⁵⁰

⁴⁷ Ex. I-3 at 13.

⁴⁸ Ex. I-3 at 13.

⁴⁹ Ex. I-1 at 48.

⁵⁰ Hayes Trial (May 28, 2015).

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299. In another example, on September 19, 2008, the three colluded again:

<u>Terry Farr</u>: ... Could you go in and out of a switch with UBS in like

two years . . .

Alexis Stenfors: Yeah yeah that's possible

<u>Terry Farr</u>: Yeah?

Alexis Stenfors: I mean hes such a good name so –

Terry Farr: Yea I mean exactly

300. Hayes, Farr, and Stenfors talked over the phone to execute several wash trades, totaling \$50,000, to generate commission for Farr that compensated him for helping Hayes and Stenfors to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives.

301. During the Hayes trial, it was also disclosed that Hayes initially formed his long-time relationship with Guillaume Adolph while Adolph worked as a trader for Merrill Lynch and Hayes was working at UBS. This relationship then continued when Adolph joined Deutsche Bank in 2008 and when Hayes joined Citigroup in December 2009.

302. Merrill Lynch knew of the Yen-LIBOR and Euroyen TIBOR manipulation and profited from it by aligning its Euroyen-based derivatives positions and reap illicit profits. For example, on May 20, 2009, a Deutsche Bank vice president wrote to a Merrill Lynch employee to confirm that the banks' Euroyen-based derivatives were aligned:

<u>Deutsche Bank vice president</u>: everybody has an advantage to leave m libor high

. . . everybody is received in tib/lib 6m . . . and

we want low 3m right? and high 3m tibor?

Merrill Lynch employee: yeah... still.

<u>Deutsche Bank vice president</u>: we all ahve same position no?⁵¹

303. Merrill also shared market-sensitive information with Defendants pertaining to Yen-LIBOR and Euroyen TIBOR. For example, on August 21, 2008, a Deutsche Bank vice president wrote to a Merrill Lynch banker, "tibor going down or not?" The Merrill Lynch banker replied, "tibor will go down slightly but not much... euroyen tibor isn't really reflective of actual money market condition in japan... people just randomly make those numbers up... pretty much like libors tho!"⁵²

C. The Contributor Bank Defendants Colluded With the Broker Defendants to Successfully Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives.

304. Interdealer brokers, sometimes known as voice brokers, act as intermediaries between buyers and sellers in the money markets and derivatives markets. The brokers match buyers and sellers in return for commissions, and also can be an important source of market information for banks. Typically, commissions are based on a percentage of the notional value of consummated transactions, which means that brokers get paid more by brokering larger trades. Within a brokerage firm, there are brokers for different currencies who intermediate derivatives transactions ("Derivatives Brokers") and brokers who intermediate cash transactions ("Cash Brokers"). In order to find matching counterparties, brokers provide bid or offer prices for a financial transaction. Those prices are conveyed in multiple ways. Brokers use "squawk boxes," which are speakerphones that can speak simultaneously to numerous trading desks of their bank clients at once, to broadly disseminate bid and offer prices. Brokers also frequently use Bloomberg instant message chats and other messaging platforms, email, and dedicated telephone lines.

⁵¹ Deutsche Bank NYSDFS Consent Order at 9.

⁵² Deutsche Bank NYSDFS Consent Order at 12.

305. Below is an example of a chat conversation between Takayuki Yagami ("Yagami"), a Euroyen-based derivatives trader at Defendant Rabobank who has plead guilty to wire fraud and bank fraud for his role in the Yen-LIBOR and Euroyen TIBOR manipulation, 53 and Paul Robson ("Robson"), an R.P. Martin Broker (and former Rabobank derivatives trader), demonstrating how inter-dealer brokers normally handle transactions in the over-the-counter market. After some opening price quotes by Robson, the conversation progresses with a bid by Yagami for a "T/N" or "Tomorrow-Next" Yen-denominated deposit ("PAY 0.01 in T/N"). 54 Following the initial offer, Robson proceeds to offer prices, working with his other clients, until he finds a counterparty willing to accept Yagami's bid:

May 7, 2008:

R.P. Martin [Robson]: hi chaps good afternoon to you! 1-6m tonars at mo only 10 3/4 offers trying for better . . .

Rabobank [Yagami]: PAY 0.01 In T/N

R.P. Martin [Robson]: try skip cheers!

R.P. Martin [Robson]: at mo depo offered at 05 poss 04 - trying for u at 01

R.P. Martin [Robson]: tn depo 04 02 - bid by bid german

R.P. Martin [Robson]: 03 offer tn depo

R.P. Martin [Robson]: got offer at 02 in tn - not sure of size

<u>R.P. Martin [Robson]</u>: still got german bid there fyg [for your guide]

R.P. Martin [Robson]: can i just ask if u are still ok paying .01 tn deep

R.P. Martin [Robson]: checking you in 20 yds [20 billion] if ok?

⁵³ See Former Rabobank Trader Pleads Guilty for Scheme to Manipulate Yen LIBOR, UNITED STATES DEPARTMENT OF JUSTICE (June 10, 2014), http://www.justice.gov/opa/pr/former-rabobank-trader-pleads-guilty-scheme-manipulate-yen-libor.

⁵⁴ "Tomorrow-Next" is the duration of the deposit and indicates it will begin tomorrow and reversed the next day.

Rabobank [Yagami]: sure!

R.P. Martin [Robson]: ok got 20 yds for you so far in tn jpy depo at 0.01

Rabobank [Yagami]: thank you. agreed

R.P. Martin [Robson]: cheers mate, great!

In addition to brokering transactions, as part of their client services, interdealer 306. brokers, including the Broker Defendants, frequently provided clients with their views and advice on market pricing and trends. Because brokers speak to multiple clients at different financial institutions and share internally the information learned from clients, they have particular market insight about cash market prices and trends in otherwise opaque markets, offering an important price discovery function. For example:

May 14, 2009:

Rabobank [Yagami]: Do you have any offers in 1m 3m and 6m

today FMG [for my guide]?

R.P. Martin [Robson]: let me see what I can get for you skipper!

R.P. Margin [Robson]: 05 give t/n + s/n combined...best 1m 17,,,,3m poss 35 offr...6m

only 60

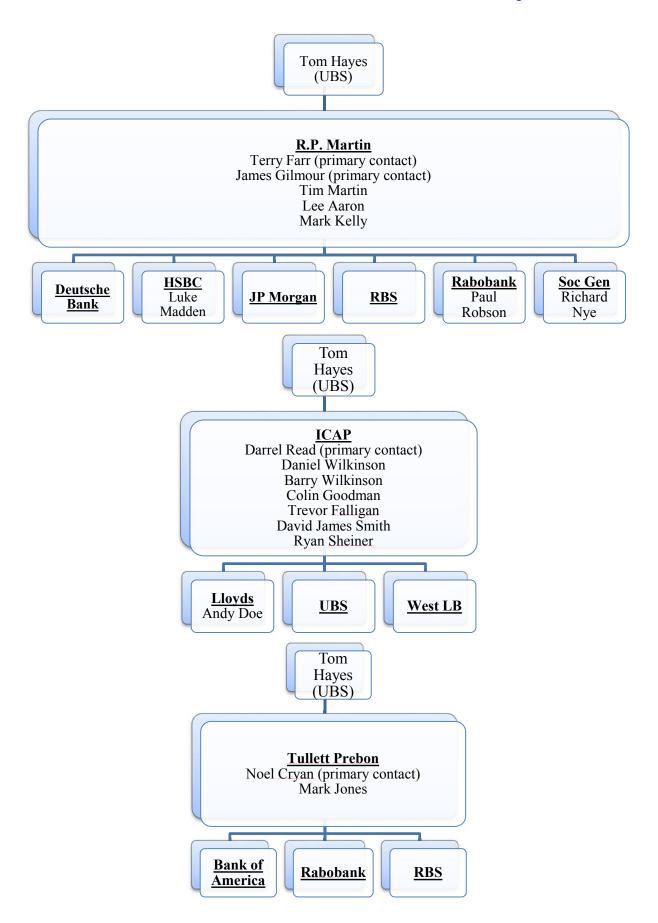
Rabobank [Yagami]: cheers mate

307. In providing this market information, interdealer brokers implicitly represent that such market information reflects their third-party unbiased assessment of borrowing costs and market pricing based on objective, observable data, some of which they uniquely possessed. It was important that the information remain unbiased because, as one trader/submitter, Laurence Porter from Citibank testified during the Hayes Trial, LIBOR submitters often relied on information provided by interdealer brokers in making their Yen-LIBOR submissions because, in theory, the brokers had the best oversight of what is going on in the market.

1. UBS Colluded With the Broker Defendants to Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives⁵⁵

308. Hayes coordinated on almost a daily basis with several interdealer brokers employed by at least five different brokerage firms to manipulate the Yen-LIBOR and, on occasion, Euroyen TIBOR submissions of other panel banks. Hayes and the brokers utilized multiple manipulative techniques, including: (i) disseminating false "Run Throughs" of suggested Yen-LIBORs to many, if not all, of the panel banks; (ii) contacting other Contributor Bank Defendants' submitters; (iii) publishing false cash market rates on electronic screens available to clients; and (iv) "spoofing" or make fake bids and offers. The charts below show display Hayes' relationship with the Broker Defendants, as described in his SFO interviews, including his primary contacts at each broker and the individuals at other Contributor Bank Defendants they typically contacted on his behalf in order to manipulate Yen-LIBOR and/or Euroyen TIBOR:

⁵⁵ See also Exs. A-1, pp. 17-25, $\P\P$ 40-61; A-2, pp. 20-36; C-1, C-2, E-1, and E-2, passim.



309. These brokers were specifically chosen for their ability to provide information on the "cash market," *i.e.*, the rates at which banks were offering to borrow and lend the very Yendenominated deposits that were supposed to underlie their Yen-LIBOR and Euroyen TIBOR submissions, as well as their relationship with (and thus their ability to influence) traders and submitters at specific Contributor Panel Banks.

310. Working with multiple Broker Defendants allowed Hayes and his co-conspirators to gain maximum influence over the market by reaching as many banks as possible. For example, Hayes worked with Terry Farr at R.P. Martin because he had good relationships with HSBC and Lloyds, in addition to contacts at Deutsche Bank, Bank of Tokyo Mitsubishi, Merrill Lynch, Norinchukin, BNP Paribas, Royal Bank of Canada, Rabobank, RBS, and Société Genéralé. ICAP and Tullet Prebon provided access to other banks, *e.g.*, ICAP had contacts at JPMorgan, WestLB, and other smaller banks while Tullet had access to Bank of America, among others. For example, in an email displayed during his criminal trial, Hayes explains the benefit of working with ICAP below:

January 7, 2007:

From: Tom Hayes

To: Yvonne Murayama (UBS)

Cc: Michael Pieri

Can we have a chat about the ICAP bro deal when its convenient?. . .From my perspective ICAP offers me a lot of value in helping with London Libor resets, traders with London CP's (eg Chase) and with smaller European names. Hence I am keen to keep a line with them.

311. As alleged further below, in exchange for their critical assistance, Hayes saw to it that the Broker Defendants were well compensated in various ways such as by directing to brokers commission-generating business including wash trades, and even by having UBS structure fees to carve out cash bonuses for brokers. Hayes also kept them in line by sometimes

threatening to move his considerable volume of business to another broker. During this period of late 2006 to late 2009, Hayes made approximately 1,200 manipulative requests to brokers.

a. "Suggested LIBORs"

- Yen-LIBOR and Euroyen TIBOR to other panel banks, expecting that the other banks would rely on that information when they made their own submissions and thereby benefit from the manipulated rate. For example, some brokers including the Broker Defendants circulated via email or by telephone each morning daily Run Thrus of the actual rates they expect to be published for key benchmark interest rates that day, such as Yen-LIBOR in various tenors, as well as other pricing information. The Broker Defendants, also at times, shared with some panel banks the intended LIBOR submissions of other panel banks.
- 313. During the Class Period, Defendant ICAP routinely disseminated Yen Run Thrus every morning at approximately 7:00 a.m. London time, well before the BBA's 11:00 a.m. Yen-LIBOR submission deadline. The Run Thrus contained the following information: (1) a column stating where rates (prices) in basis points for Yen cash trades, for all tenors, were observed the previous trading day, broken down by Japanese and non-Japanese financial institutions; (2) a column stating the spread of rates for Yen cash trades for all tenors that were observed as of the market opening in London and late afternoon Tokyo, broken down by Japanese and non-Japanese financial institutions; and (3) a column titled "Suggested LIBORs," which contained Cash Broker 1's (Colin Goodman) suggestions as to where the published Yen-LIBOR fixing for each tenor between one month and one year would set that day. ⁵⁶

⁵⁶ See Ex. C-1, pp. 6-15.

- i. The Critical Assistance of ICAP Brokers in
 Disseminating False and Misleading "Suggested
 LIBORs"
- 314. In the fall of 2006, shortly after Hayes joined UBS, he became a client of ICAP Derivatives Broker 1 (Darrell Read). Hayes quickly became known as a high volume, aggressive and dominant Yen derivatives trader who was injecting significant liquidity into a previously illiquid market. Because he commanded a large trading volume, Hayes was a highly desirable and sought after client of interdealer brokers.
- 315. To ensure he received significant business from Hayes, ICAP Derivatives Broker 1, based at that time in London, agreed to work overnight (Tokyo is eight hours ahead of London) to better serve Hayes during Tokyo business hours and became the primary contact for Hayes at ICAP. As a result, ICAP Derivatives Broker 1 gave up his other London-based clients, and by early 2007 relied almost exclusively on Hayes and UBS for their business and resulting commissions.
- 316. From the outset of his client relationship with Hayes and to keep Hayes and UBS's business, ICAP Derivatives Broker 1 routinely and aggressively assisted him in efforts to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives. When ICAP Derivatives Broker 1 was out of the office, other Yen derivatives brokers on ICAP's Yen Desk, primarily Derivatives Broker 2 or the Yen Desk Head, coordinated with Hayes on his requests to manipulate Yen LIBOR and/or Euroyen TIBOR; at times other brokers on the Yen Desk helped him as well.
- 317. To accomplish Hayes's manipulative goals, ICAP Derivatives Broker 1 needed and obtained the critical assistance of ICAP Cash Broker 1. ICAP Cash Broker 1 had long-standing relationships and daily contact with many of the Yen panel bank submitters. He often discussed with submitters what their intended Yen-LIBOR submissions would be and what other

panel banks might submit. ICAP Cash Broker 1 also issued the daily Suggested LIBORs as part of his Run Thrus upon which Yen-LIBOR submitters improperly relied in whole or in part at times to make their Yen-LIBOR submissions.

- 318. As early as October 2006, ICAP Derivatives Broker 1, acting on behalf of Hayes, began asking ICAP Cash Broker 1 to skew his Suggested LIBORs that he provided in the Run Thru emails or in calls to traders or submitters to reflect the rates or levels desired by Hayes. ICAP Cash Broker 1 knew from the outset that such requests were for Hayes. At times, Hayes reached out to ICAP Cash Broker 1 directly, such as on March 23, 2007: "hi [ICAP Cash Broker 1] know [ICAP Derivatives Broker 1] is away and this may seem strange given my recent requests but really need a high/unchanged 1m libor today, low for everything else. thanks as always [UBS Senior Yen Trader Hayes]."
- 319. ICAP Cash Broker 1's skewed Suggested LIBORs sent to Yen-LIBOR submitters as part of his daily Run Thrus was the primary and most effective method by which certain ICAP brokers assisted Hayes in his efforts to manipulate the daily Yen-LIBOR fixings. ICAP Cash Broker 1's Run Thrus were widely circulated among and valued by Yen market participants at the panel banks and elsewhere. More than 100 cash and derivatives traders received Cash Broker 1's Run Thru emails, including traders from nearly all of the Yen-LIBOR panel banks and, at different times, submitters from at least eleven of the sixteen Yen-LIBOR panel banks. Many, if not all of the recipients of the Run Thrus, asked to receive the emails. ICAP Cash Broker 1 sent skewed Suggested LIBORs even to Bank of England staff.
- 320. ICAP Yen brokers, Hayes and others believed that ICAP Cash Broker 1's Suggested LIBORs directly influenced the Yen-LIBOR submissions by panel banks. At least

several panel banks considered the Run Thrus when making their Yen-LIBOR submissions, and at times, some banks simply submitted the very rates suggested by Cash Broker 1.

- 321. For example, the Yen-LIBOR submissions of certain panel banks overwhelmingly mirrored the Suggested LIBORs of Cash Broker 1. Unidentified Bank A submitted one-month, three-month, and six-month Yen-LIBORs that were identical to Cash Broker 1's LIBOR suggestions on ninety (90) percent of the submission dates in 2007, and eighty (80) percent of the submission dates in 2008. Similarly, unidentified Bank B submitted one-month, three-month, and six-month Yen-LIBORs that were identical to ICAP Cash Broker 1's LIBOR suggestions on eighty (80) percent of the submission dates in 2008, and seventy (70) percent of the submission dates in 2009.
- 322. Even submitters at panel banks that tried to make benchmark interest rate submissions that reflected an assessment of the costs of borrowing funds in the interbank Yen market may have passed on false or misleading submissions because they used ICAP brokers' purported unbiased assessments of Yen borrowing rates and Suggested LIBORs to inform their submissions. Their reliance on ICAP brokers meant that their submissions did not actually reflect borrowing costs, but rather Hayes's manipulated rates. The ICAP brokers believed that the wide dissemination of and reliance on the Suggested LIBORs would increase the chances that they would at times be successful in manipulating Yen-LIBOR submissions, and thereby Yen-LIBOR, for Hayes and others. This was the "libor service" (as coined by the brokers involved) they provided to Hayes.
- 323. ICAP Yen brokers gloated over their influence on the Yen market and the Yen-LIBOR fixings. They referred to panel banks as "copying" the Cash Broker's Suggested LIBORs, and called them "sheep" because they followed wherever the Cash Broker led them

("[Cash Broker 1] sending out higher than he thinks so hopefully the sheep will just copy" (emphasis added)). Cash Broker 1 believed and boasted that a number of banks were copying his Yen-LIBOR recommendations. Cash Broker 1 referred to himself and was called by others by such monikers as "Mr. LIBOR," "Lord LIBOR," "Lord Bailiff" and "M'Lord." At least ICAP Derivatives Broker 1 also believed Cash Broker 1 was successful in "moving the market" on a number of occasions. ICAP Derivatives Broker 1 sold this success to Hayes, noting at various times as follows:

- "[Cash Broker 1] has been doing a number on some of the contributors because a couple of them were edging their libors slightly lower yesterday before he intervened;"
- "morning mate ... seems [Cash Broker 1's] cover does have some influence, people actually took notice of his 87 libor! Will be back on his case again today;"
- "i hope that 6m libor has got me back in your good books! I used all my powers of persuasion on that one;-) ... think [Bank A and Bank B] must have looked at [Cash Broker A's] first suggestion they both moved up 11bps to 1.10;" and
- "you have a really big fix tonight i believe? if [Cash Broker 1] sends out 6m at a more realistic level than 1.1 0 i reckon [Bank A and Bank B] will parrot him, it might mean 6m coming down a bit."
- 324. Communications between the ICAP Yen brokers and the UBS Senior Yen Trader and among the ICAP brokers reflect the ICAP brokers' willingness and significant efforts to help Hayes. *See* App. at 37 ¶ 97, 91 ¶ 236. The communications also reflect the ICAP brokers' and Hayes's belief that they had an impact on the Yen-LIBOR fixings, that ICAP Cash Broker 1's suggested rates did not always reflect his true and objective assessment of where Yen-LIBOR would fix, but were designed to help Hayes, and Hayes highly valued the ICAP brokers' special LIBOR services and was willing to pay for them, with gratuities like a curry meal or champagne or additional commission-generating trades, or bonuses as the relationship developed over time.

- ii. BBA Guidelines Expressly Prohibited the
 Contributor Bank Defendants From Relying on
 Interdealer Brokers Market Color When
 Making Yen-LIBOR Submissions
- 325. BBA guidelines issued in October 2009 provided that LIBOR submitters "should not ask intermediaries where they believe LIBOR rates will set on a given day and use this as a basis for submissions. This misses the point of the benchmark, and is a circular process that would rapidly lead to inaccurate rates. Yet several Yen-LIBOR Contributor Banks considered the Run Thrus when making their Yen-LIBOR submissions, and at times, some banks simply submitted the very rates suggested by Defendant ICAP. For example, unidentified Bank A submitted one-month, three-month, and six-month Yen-LIBORs that were identical to Defendant ICAP's LIBOR suggestions on 90 percent of the submission dates in 2007, and 80 percent of the submission dates in 2008. Similarly, unidentified Bank B submitted one-month, three-month, and six-month Yen-LIBORs that were identical to Defendant ICAP's LIBOR suggestions on 80 percent of the submission dates in 2008, and 70 percent of the submission dates in 2009.

b. Publishing False Market Rates to Panel Banks on Broker Screens

326. Hayes and the Broker Defendants also falsified the purported prevailing market rates that the Broker Defendants displayed on electronic screens made available to the Broker Defendants clients, such as panel banks. The screens were intended to show prices of actual cash or derivatives trades, which panel banks then could take into consideration in determining Yen-LIBOR submissions. Hayes wanted the Broker Defendants to report false prices on the screens in an effort to skew other banks' Yen-LIBOR submissions. Because these screens were available to several, if not all, of the Yen-LIBOR panel members and the submitters used this information at times in determining submissions, dissemination of false market rates had the potential of improperly influencing many of the Yen-LIBOR submissions on any given day.

327. In the below example Broker Defendant ICAP and Hayes discuss how ICAP would falsify the screen rates artificially low "as the futures open" to aid Hayes's fraudulent influence on other panel bank submissions:

June 3, 2009: (Emphasis added.)

<u>UBS [Hayes]</u>: "can you get the swasp [swaps] on the screen all lower lyl8m2y3y ... "

ICAP: "... will move the screen as the futures open, you lioke low everything?"

c. "Spoofing": Publication of False Bids and Offers

- 328. The Contributor Bank Defendants and Broker Defendants also colluded to manipulate Euroyen-based derivative prices by disseminating false bids and offers, described by Defendants as "spoofs," for Euroyen-based for the purpose of manipulating both the price of Euroyen-based derivatives and Yen-LIBOR and Euroyen TIBOR rates. Defendants colluded to disseminate spoof bids and offers through various means including through Broker Defendants' Yen Desk "squawk boxes" which allow the Broker Defendant to disseminate the spoof bids and offers to a multitude of Euroyen-based derivatives traders, including multiple Euroyen rate submitting bank traders, and through OTC electronic exchange systems utilized by Euroyen-based derivatives traders, including multiple Euroyen rate submitting bank traders, to execute Euroyen-based derivatives transactions.
- 329. For example, between July 7, 2008 and June 29, 2009, false offers were discussed on the telephone by Hayes and Broker A on at least 12 occasions. In one such conversation on January 27, 2009, Broker A explained that he had been: "... offering ... some cheap 3s all morning and I shouted them-down at [Panel Bank 3] as well ... we were offering them at 50 mate ... that wasn't even true."

330. As an additional example, during a June 10, 2009 electronic chat, Hayes and Broker-B referred to "spoofing" when discussing efforts they would make to manipulate the Yen-LIBOR "game" that day:

<u>UBS [Hayes]</u>: LOW 1m [Yen-LIBOR] . . . LOW 3m [Yen-LIBOR]. . .

HIGH 6m . . . 6m [Yen-LIBOR] is important today mate . .

. pls spoof bids

<u>Broker-B</u>: rite ok mate ill make a special effort

Later in the same chat, Broker-B remarked to Hayes:

mate yur getting bloody good at this libor game . . . think of

me when yur on yur yacht in monaco wont yu

331. In another example of spoofing, revealed during the Hayes Trial, R.P. Martin broker Terry Farr communicates to Hayes that he has been offering false prices all day to help with the Yen-LIBOR and/or Euroyen TIBOR manipulation:

April 16, 2009:

R.P. Martin [Terry Farr]: I've been offering them out at 25 today

Hayes: Oh, brilliant

R.P. Martin [Terry Farr]: Yeah, yeah. So

Hayes: Is that genuine?

R.P. Martin [Terry Farr]: No

- D. The Contributor Bank Defendants Colluded Through the Broker Defendants to Successfully Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives⁵⁷
- 332. The Broker Defendants also served as conduits to other Contributor Panel Banks, passing along requests for specific Yen-LIBOR submissions on particular trading days.
- 333. For example, R.P. Martin Yen Broker 1 and Yen Broker 2 contacted their Yen-LIBOR submitter clients directly and asked them to move their Yen-LIBOR submissions as a "favor" to UBS and Hayes. R.P. Martin Yen Broker 1 also enlisted the help of certain other brokers at R.P. Martin, including managers of certain trading desks, to reach out to additional Yen-LIBOR submitters, in an effort to further manipulate the daily Yen-LIBOR fixing.
 - 1. The Successful Manipulation of Three-Month Yen-LIBOR on February 25, 2009.
- 334. On this particular day, UBS Senior Yen Trader Hayes needed a low three-month and needed six-month Yen-LIBOR to stay "high as a drug addict" in order to financially benefit his derivatives positions.
- 335. R.P. Martin's Yen Broker 1 and UBS Senior Yen Trader Hayes first spoke via Bloomberg chat with the R.P. Martin broker searching for a way to earn a commission as his book was "pear shaped" in the month of February.

Yen Broker 1: anything cookjing i can try desperate for a decent trade gone

pear shaped this month

Senior Yen Trader: we can switch 2yrs today i'll talk later in mean time low lm and

3m we must keep 3m down and high 6m act 6m unchanged today try for low on all of em from tomorrow need 6m high as a drug

addict

Yen Broker 1: ok ill do my best for those tday hahahha like it ok

⁵⁷ See also Exs. C-1, C-2, E-1 (pp. 10-14) and E-2, passim.

336. Hayes acquiesced and suggested to "switch 2yrs ***..[at] 150b 2yrs bro both sides" and asked the R.P. Martin Yen Broker to enlist Defendant RBS to take the other side of the wash trade. The R.P. Martin Yen Broker readily agreed as this one trade alone would "make3 [sic] budget for the month so massive yes."

Senior Yen Trader: we can switch 2yrs ***we can do 150b 2yrs bro

both sides ask [RBS Yen Trader] will that help?

Yen Broker 1: ok mate that will make us make3 budget for the

month so massive yes.

337. R.P. Martin Yen Broker 1 and Hayes continued to discuss their scheme by telephone with the two discussing who R.P. Martin may be able to "f*cking lean on a bit today" to artificially lower the three-month Yen-LIBOR "a couple of pips" to benefit UBS's derivatives positions. They agree that R.P. Martin can lean on RBS and unidentified Bank 2, Bank 5 and Bank 6.

Yes, I know, you need the LIBOR stuff. I know that's really

important. I know how important it is, you know how it is so

Senior Yen Trader: I mean I'm just trying to think who you might be able to f*cking

lean on a bit today.

Yen Broker 1: yes, go on give me some names.

<u>Senior Yen Trader</u>: it's really important to get the 3's down for me.

Yen Broker 1: 3's more than anything else.

Senior Yen Trader: Yes. Really, well, I mean today I need them all low but, I mean,

3's particularly. ***Right [Bank 5] put his at 64, mate. Can you

get him down?

Yen Broker 1: 64 [Bank 5]. Okay, I'll have a word with him.

Senior Yen Trader: [inaudible] up to 65

Yen Broker 1: Who's that? [Bank 2]?

Senior Yen Trader: Yes.

Yen Broker 1: Right, I'll go and ask him for a -[Yen Broker 2] off today

but I'll go in and I'll get a favor.

Senior Yen Trader: Yes, ask him if he can move it to 63 for the day or something

***Who else is [inaudible]?

Yen Broker 1: Rabo is all done out of Utrecht now, even though it's still under

London.

Senior Yen Trader: RBS is 64 ***you don't talk to RBS, do you?

Yen Broker 1: No but the guy in the arbi does, I'll see if he can, sort of, see if he

can have a word with him for us*** So [Bank 2], [Bank 5] and

RBS, yes? See if I can get that down some, yes?

Senior Yen Trader: Yes, if you could mate. * * * And you don't speak to [Bank 6],

do you?

Yen Broker 1: He's on the arbi so I could have a word with the guy that speaks to

him and see if he can have a word. See if he can drop his LIBOR a

couple of pips today ...

Senior Yen Trader: He's at f*'cking 68 dude * * * if he went to 60 that would be

f*cking massive.

Yen Broker 1: Okay, I'll have a word with that as well, mate, alright?

338. R.P. Martin Yen Broker 1 next assured Hayes that he or another R.P. Martin broker made contact with multiple Yen-LIBOR submitters to ensure that their Yen-LIBOR submissions were consistent with Hayes's needs. On February 25, R.P. Martin Yen Broker 1 personally contacted submitters at two separate unnamed banks, identified in the R.P. Martin CFTC Order only as Bank 1 and Bank 2. Yen Broker 1 also enlisted the assistance of a desk

head from R.P. Martin's Arbitrage Desk ("Arbitrage Desk Head"), who had a relationship with the Yen-LIBOR submitter at Bank 6.

- 339. As set forth below, through contextual reverse engineering, Plaintiff identified Bank 1 as Defendant HSBC.
- 340. In the telephone call between R.P. Martin Yen Broker 1 and Bank 1 (HSBC) Yen-LIBOR submitter, R.P. Martin Yen Broker 1 asks HSBC to lower its three-month Yen-LIBOR "a couple of ticks." The R.P. Martin Yen Broker also makes clear that this request comes straight from UBS as "he's got a couple of fixings coming":

Yen Broker 1: I need a favor.

Bank 1 Submitter: yes.

Yen Broker 1: ***basically I got stuffed in something earlier in an IRS and it

would have cost me about 40,000 to get out of it, yes. Geezer [referring to the Senior Yen Trader] dug me out, as a favor back to him he's asked me, for one day today, he's got a couple of fixings coming. He wants to see if he can get LIBORs down a little bit. I've said I'll try and do what I can. Is there any way you might be

able to set them a little bit lower today just to return the favor? * *

*

Bank 1 Submitter: Yeah, well cash is a little bit easier, isn't it so I'll

Yes, if you could get them down a couple of ticks or something

today that would be f*cking, like the 3's *** I mean if you

could do that for me mate that would be a personal favor to you.

Bank 1 Submitter: Yes, yes, but yes cash is easier so I'll fix a couple up.

- 341. As set forth below, through contextual reverse engineering, Plaintiff identified Bank 2 as Defendant Bank of Tokyo-Mitsubishi.
- 342. In a separate telephone call between R.P. Martin Yen Broker 1 and the Yen-LIBOR submitter at Bank 2 (Bank of Tokyo-Mitsubishi), the R.P. Martin broker asks that the

Bank of Tokyo-Mitsubishi drop its three-month Yen-LIBOR submission "a tick." The Bank of Tokyo-Mitsubishi agrees, even though the Bank of Tokyo-Mitsubishi planned to submit the same three-month Yen-LIBOR rate as the day before:

Yen Broker 1: Can I ask you a small favor?

Bank 2 Submitter: Yeah.

Yen Broker 1: What are you going to set in your LIBOR 3's today?

Bank 2 Submitter: Ah, same, 65.

Yen Broker 1: Is there any way you might be able to set them down a pip 'cause

I'm getting a big trade out of it?

Bank 2 Submitter: Sorry?

Yen Broker 1: I'm getting someone do me a big trade if they said if I help them

sort of get LIBORs down a tick today.

Bank 2 Submitter: Yeah, okay. ***

Yen Broker 1: Ah, mate, I appreciate that.

343. As set forth below, through contextual reverse engineering, Plaintiff identified

Bank 6 as Defendant Norinchukin.

344. R.P. Martin Yen Broker 1 enlisted the help of the R.P. Martin Arbitrage Desk

Head to reach out to Bank 6 (Norinchukin) to manipulate its three-month Yen-LIBOR artificially

lower from 0.68 to 0.67. Below is the first telephone exchange:

Telephone calls related to contacting Yen-LIBOR submitter at Bank 6:

1st telephone call:

Yen Broker 1: Can you do me a favor?

Arbitrage Desk Head: Only if you tick the arbi box on that deal.

Yen Broker 1: We've got a f*cking, yes, we've got a f*cking huge

deal but on the back of it he's asked me to do him a favor and see if I can have a word with a couple of people, see if LIBOR, see if I could get it down a pip. Would you - Bank 6 is setting his at 68 at the moment, do you reckon he

6 is setting his at 68 at the moment, do you reckon he might, ask him if he might be able to set it at 67 just today

for us?

Arbitrage Desk Head: 3's LIBOR at 67?

Yes, instead of 68. It would be a big favor.

* * *

Arbitrage Desk Head: All right, all right.

345. The R.P. Martin Arbitrage Desk Head readily agreed and made a phone call to Bank 6 (Norinchukin) who recognized its "month end" and that R.P. Martin made the request on behalf of another Yen-LIBOR Contributor Bank.

2nd telephone call:

Arbitrage Desk Head: Where you setting 3's Yen LIBOR? Today.

Do you set the LIBOR?

Bank 6 Submitter: Yes.

Arbitrage Desk Head: Where are you setting it?

Bank 6 Submitter: Actually f*cking can't even remember what I set it

yesterday.

Arbitrage Desk Head: 68, I think.

<u>Arbitrage Desk Head</u>: So you wouldn't be setting it at 67?

Bank 6 Submitter: Why is that a request or?

Arbitrage Desk Head: Well sort of an underlying—

Bank 6 Submitter: Yes. Potentially. I don't know, it's not going to be a lot

different. If anything, yes, I mean, it's not going to go

higher, let's put it that way.

Arbitrage Desk Head: No, someone just said where are people setting the LIBORs

today. I think they got some big fixing, they just wondered.

Bank 6 Submitter: Ah, yes, month end isn't it.

Arbitrage Desk Head: Set at 67 by any chance, would it be?

Bank 6 Submitter: Month end doo dah, isn't it? I think, though, that

just looking -I've got a funny feeling ours is quite high in the 3's at the moment so it almost gets knocked out of the

calculation.

Arbitrage Desk Head: ***Alright, well okay, as I said nothing shifty or anything

but just wondered whether you was setting it at 67 today.

Bank 6 Submitter: We'll see.

Arbitrage Desk Head: If you catch my drift. Okay.

346. R.P. Martin Yen Broker 1 followed up with the R.P. Martin Arbitrage Desk Head to see if Bank 6 (Norinchukin) agreed to go along with the plan.

3rd call telephone:

Arbitrage Desk Head: Did he ask for [Bank 6] in particular?

<u>Yen Broker 1</u>: He's just given me some names whose LIBORs are quite

high at the moment to see if I can get them down a bit. No,

not him, not that one bank, just a group of banks.

Arbitrage Desk Head: He thinks that I'll be -he thinks that he's out of the equation

anyway.

Yen Broker 1: Right, okay. Well it just makes a difference if everyone's

putting theirs down a bit because I've got a couple of people to put them ... [Bank 2]'s putting his down a pip; [Bank 1]'s putting his down a couple of pips. I mean, if there's a few people putting them down it should set the

average better.

Arbitrage Desk Head: He's-I've asked him and he's said we'll see.

Yen Broker 1: Alright, that's fine.

Arbitrage Desk Head: If I set out on a line then f*cking

Yen Broker 1: Don't push it, no don't ever push it.

Arbitrage Desk Head: Not that, it's the old auditors as well.

Yen Broker 1: Absolutely, no problem mate, no problem at all.

347. R.P. Martin Yen Broker 1 kept Hayes informed throughout the day of February 25, 2009, updating him regarding whether Yen-LIBOR submitters had agreed to manipulate their Yen-LIBOR submissions in a manner that would benefit Hayes.

1st telephone call between the R.P. Martin Yen Broker 1 and Hayes:

Yen Broker 1: I think I've got [Bank 1] down 2, I've got [Bank 2] down 1.

Senior Yen Trader: Yes.

Yen Broker 1: I think Bank 6's going to come down 1. I'm working on

Bank 5.

Senior Yen Trader: Brilliant. Alright mate, I appreciate that.

Yen Broker 1: Alright, so it should definitely have an impact, alright.

2nd telephone call between R.P. Yen Broker 1 and Hayes:

Yes, I've done it. I've tried to call in some favors, mate,

and I think I'll be alright.

<u>Senior Yen Trader</u>: What like the 1's 3'sand 6's though?

Yes. Especially 3's mate, I've made an extra effort on the

3's, alright. I think [Bank 1] will put his down a couple of

points for the whole lot. Alright?

Senior Yen Trader: Alright, great. You're a star [Yen Broker 1], mate.

348. R.P. Martin's efforts on February 25, 2009 on behalf of Hayes were successful. All three banks Bank 1 (HSBC), Bank 2 (Bank of Tokyo Mitsubishi), and Bank 6 (Norinchukin) transmitted lower three-month Yen-LIBOR submissions, resulting in a lower Yen-LIBOR fixing for February 25, 2009.

- 349. Upon information and belief, Bank 1 is Defendant HSBC. A review of three-month Yen-LIBOR data and Defendants communications shows that R.P. Martin Yen Broker 1 got [Bank 1] "down 2." The three-month Yen-LIBOR data obtained by Plaintiff shows that the only Yen-LIBOR Contributor Bank to go "down 2" from February 24 to February 25, 2009 was Defendant HSBC dropping from .6 (February 24) to .58 (February 25).
- 350. Upon information and belief, Bank 2 is Defendant Bank of Tokyo-Mitsubishi as a review of the same three-month Yen-LIBOR data shows that the Bank of Tokyo-Mitsubishi was the only Yen-LIBOR Contributor Bank to drop from 0.65 (February 24) to 0.64 (February 25) consistent with R.P. Martin Yen Broker 1's request.
- 351. Upon information and belief, Bank 6 is Defendant Norinchukin Bank as a review of the same three-month Yen-LIBOR data shows that Norinchukin shows that it was the only Yen-LIBOR Contributor Bank to drop from 0.68 (February 24) to 0.67 (February 25) consistent with the R.P. Martin Arbitrage Desk Head's request.

- 2. The Successful Manipulation of One-Month Yen-LIBOR on March 31, 2009.
- 352. As another example of the key role of the Broker Defendants in the conspiracy, on March 31, 2009, former UBS Trader Tom Hayes asked unidentified Broker-C to help influence 9 of the 16 Yen-LIBOR Contributor Bank Defendants by convincing them to lower their Yen-LIBOR submissions from the previous day, thus lowering the resulting 1-month and 3-month Yen-LIBOR fix. This instant message exchange and the resulting one-month Yen-LIBOR fix on this date show that at the very least there were a number of Yen-LIBOR Contributor Banks were solicited to participate or who did participate in the conspiracy. As Hayes urged Broker-C:

Trader 1 (Hayes): mate we have to get 1m and 3m down . . . 1m barely fell yesterday . . . real important

Broker-C: yeah ok

Trader-1: banks to have a go w in 1m are

Trader-1: banks to na Trader-1: [Bank-F]
Trader-1: [Bank-G]
Trader-1: [Bank-H]
Trader-1: [Bank-E]
Trader-1: [Bank-I]
Trader-1: [Bank-C]

Trader-1: [Bank-A] Trader-1: [Bank-J]

Trader-1: and [Bank-K]

Trader-1: pls

Broker-C: got it mate

353. That day, consistent with Tom Hayes's request, 6 of the 9 Yen-LIBOR Contributor Panel Banks listed above lowered their 1-month Yen-LIBOR submissions relative to the previous day, including Contributor Bank Defendants: (i) Sumitomo Mitsui; (ii) Mizuho Corporate Bank; (iii) RBS; (iv) Barclays; (v) Norinchukin; and (vi) Rabobank. As a result, the published 1-month Yen-LIBOR fix dropped by a full basis point from the day before.

3. The Broker Defendants Were More Than Just Gateways to the Contributor Banks, They Were Also Active Co-Conspirators

354. On July 22, 2009, former UBS Senior Yen Trader Hayes along with at least two additional Yen-LIBOR Contributor banks, identified as "Yen Bank F" and "Yen Bank J," and "Derivatives Broker A1" "hatched" a scheme to artificially drive down six-month Yen-LIBOR by August 11, 2009:

<u>Senior Yen Trader [Tom Hayes]</u>: "11th aug is the big date i still have lots of 6m

fixings till the 10th"

Derivatives Broker Al: "christ keeps getting extended started off as 14th of

this month:-)"

Senior Yen Trader [Tom Hayes]: "i know"

<u>Derivatives Broker Al</u>: "if you drop your 6m dramatically on the 11th

mate, it will look v fishy, especially if [Yen Bank J] and [Yen Bank F] go with you I'd be v careful how you play it, there might be cause for a drop as you cross into a new month but a couple of weeks

in might get people questioning vou."

Senior Yen Trader [Tom Hayes]: "don't worry will stagger the drops ie 5bp then

5bp"

Derivatives Broker Al: "ok mate, don't want you getting into sh it"

Senior Yen Trader [Tom Hayes]: "us then [Yen Bank F] then [Yen Bank J] then

us then [Yen Bank F] then [Yen Bank J]"

Derivatives Broker Al: "great the plan is hatched and sounds sensible"

355. As revealed in ICAP's own settlement with the CFTC, Derivatives Broker A1 is a former broker at Broker Defendant ICAP. Upon information and belief, Yen Bank F is Deutsche Bank and Yen Bank J is HSBC. To conceal their manipulation, Hayes and his cohorts (HSBC and Deutsche) "staggered" their false reports of six-month Yen-LIBOR to the BBA by UBS, Bank F [Deutsche] and Bank J [HSBC], *i.e.*, the reporting of an artificially low (five (5) basis points lower) submission by UBS on one day, then the reporting of an artificially low submission

of Yen Bank F [Deutsche] on another day, and then the same by Yen Bank J [HSBC]. The CFTC determined that from late July 2009 through mid-August 2009, UBS's submission fell twelve (12) basis points, and Yen Bank F and Yen Bank J's submissions fell by fourteen (14) and fifteen (15) basis points, respectively. 6-month Yen-LIBOR data obtained by Plaintiffs shows that UBS's 6-month Yen-LIBOR fell twelve (12) basis points from .72 (on July 22, 2009) to .60 (on August 20, 2009). The only other Yen-LIBOR bank to drop its 6-month Yen-LIBOR fourteen (14) basis points over this same period was Defendant Deutsche, from .69 (on July 22, 2009) to .55 (on August 20, 2009). The only other Yen-LIBOR bank to drop its 6-month Yen-LIBOR 15 basis points over this same period was Defendant HSBC, from .7 (on July 22, 2009) to .55 (on August 20, 2009).

- 4. The Contributor Bank Defendants Knew the Broker Defendants Were Actively Aiding and Abetting the Manipulation of Yen-LIBOR.
- 356. Hayes's use of brokers to manipulate Yen-LIBOR was widely known among the traders on the UBS Yen trading desk from 2007 through 2009. In fact, the desk held daily morning meetings before Yen-LIBOR was set, in which Hayes commonly announced the direction he intended to manipulate Yen-LIBOR that day.
- 357. After Hayes left UBS in September 2009, the more junior trader who replaced him had discussions with the manager of the Yen trading desk. Based on those discussions, the junior trader felt pressured to continue using brokers to manipulate Yen-LIBOR through at least January 2010.
- 358. UBS's Yen-LIBOR submitters, derivatives traders, and their managers knew this conduct was wrong and therefore attempted to avoid creating evidence of the manipulation. For example, the manager of the Yen derivatives desk cautioned that they should avoid creating written records and should instead use cell phones when contacting brokers. Moreover, to avoid

detection of their manipulation, UBS derivatives traders and brokers used coded language in communications to discuss the dissemination of misinformation to other Contributor Panel Banks to influence the ultimate Yen-LIBOR fix.

- E. The Broker Defendants Reaped Commissions, Bonuses and Accepted Bribes in the Form of Wash Trades from the Contributor Bank Defendants for Their Critical Assistance in the Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives⁵⁸
- 359. Hayes sought to ensure the cooperation of brokers by offering drinks and bottles of champagne, commission-generating business, and large cash bonuses for a Broker at Defendant ICAP. The Broker Defendants were compensated for their assistance in several ways: (1) providing them with substantial amounts of business, thus generating fees or commissions; (2) by engaging in circular transactions (two equal and opposite transactions that canceled each other out) solely for the purpose of generating commissions for the brokers; and/or (3) by engineering a special compensation deal between UBS and Broker Defendant ICAP. Former UBS Senior Yen Trader Hayes also used his financial leverage with at least one broker for whom UBS generated significant commissions by threatening to cut off UBS's business with the brokerage if the firm did not comply with his requests.

1. Extra Trades to Generate Unearned Commissions

- 360. Former UBS Senior Yen Trader Hayes routinely offered brokers at unidentified Brokerages B, C and D extra transactions or other business, and thus UBS-paid commissions, to ensure they would provide needed assistance. For example, the former UBS Senior Yen Trader Hayes told them:
 - o "I still owe you some deals;"

⁵⁸ See also Exs. B-4, pp. 21-24; C-1, C-2, E-1, pp. 15-18 and E-2, passim.

- o "we'll do some big tix soon i promise;"
- o "do the bisness and i'll sort you out MASSIVE;"
- o "if you get 3m down you'll get a decent deal from me tomorrow;"
- o "if you manage that for the next 2 weeks you will see the benefits;"
- o "make sure they know that it pays for them to help out;" and
- o "i need to pay .. to give u a trade."

2. "Wash" Trades to Generate Illegitimate Commissions

- 361. In his SFO interviews, Hayes describes using two types of sham transactions to compensate R.P. Martin and Tullet Prebon for their assistance in manipulating Yen-LIBOR and/or Euroyen TIBOR: (1) "wash trades" also known as a "flat switch" where Hayes and another counterparty would exchange financial instruments with the same notional value, at the same price; and (2) "switch trades" where the notional amounts would be identical but the prices would be slightly different, such that the party facilitating the trade (*i.e.* opposite Hayes) would be paid a little bit more in exchange for agreeing to assist with sham transaction compensating one of the Broker Defendants. During the Class Period, wash trades and switch trades accounted for a substantial part of R.P. Martin's and Tullet Prebon's Yen-desk revenue, reaching 38% and 35% of the total commissions UBS paid to these brokers in 2009, respectively.
- 362. While these trades resulted in a financial nullity for the counterparties, they generated significant illegitimate commissions for the Broker Defendants, in particular Broker Defendant R.P. Martin, who brokered both sides of the wash trades. At R.P. Martin, the commissions were shared by the entire Yen Desk, giving other R.P. Martin Yen brokers incentives to assist in former UBS Senior Yen Trader Hayes manipulative schemes. For example, wash trades made UBS the second largest client of the R.P. Martin Yen Desk during 2008 and 2009, accounting for nearly 9% of the R.P. Martin Yen Desk's revenue.

According to Hayes SFO interviews, wash trades and switch trades started out 363. closely linked to a Broker Defendant's assistance in manipulating Yen-LIBOR and/or Euroyen TIBOR. For example, "the [February 25, 2009] switch trade at the very start was very clearly linked to the likes of help with six month LIBOR." However, as Hayes further explained, "I would be more inclined to make sure I paid some brokerage to reflect the additional value I perceived that we as a bank or as a desk were getting" from a Broker Defendants' ability to help manipulate Yen-LIBOR and Euroyen TIBOR. For example, below is the first conversation between Hayes and Noel Cryan at Broker Defendant Tullet Prebon in which Hayes explains the use of wash trades and switch trades as compensation:

February 9, 2009:

Hayes: do you know your cash desk?

ie the guy who covers yen on your cash desk

Tullet Prebon [Noel Cryan]: yes mate i do

Hayes: right from now on I need you to ask him a favour on the fixes

I will make sure it comes back to you

I already do it with icap

Basically can you ask him to broke 3m cash ie libor lower for me today

I will look after you off the back of it

I do that for rpms [R.P. Martin] too

So emphasise the importance to you

Just suggest it [3m Yen-LIBOR] look a little softer [lower] to his accounts

Tullet Prebon [Noel Cryan]: Ok mate I understand I will go and speak to him

<u>Hayes</u>: Stuff like that

Thanks mate

Is very important to me today

Tullet Prebon [Noel Cryan]: Just spoke to them and they are on the case

Hayes: Ok much appreciated

If we do this going forwards it will come back to you in spades

Did you emphasise the importance?

Tullet Prebon [Noel Cryan]: I did

Hayes: ta

Like I said what normally do is if I get help on the LIBORS over the month I normally do at the end of the month I normally do a couple of like in and outs

<u>Tullet Prebon [Noel Cryan]</u>: That's good because Neil [Danzinger at RBS] wants to pay for his trip to Vegas already, so he's been asking us about them already. Yeah so I'll be in touch over the month

- 364. As time went on, "[the wash trades] became sort of like just a monthly payment type of thing" not related to any specific manipulative conduct. The recurring nature of these payments was in part to foster loyalty between Hayes and the Broker Defendants but also to keep the brokers motivated. As Hayes explained "[i]f this, if these people are helping you out, you've got to in some way shape or form incentive or reward them, otherwise they're going to sit there going why the hell am I doing this?"
- 365. Specifically, R.P. Martin Yen Broker 1 brokered at least nine (9) wash trades between September 2008 and August 2009 (nearly one a month) on behalf of former UBS Senior Yen Trader Hayes. These trades alone generated more than \$412,000 in illegitimate commission revenue for the R.P. Martin Yen Desk. Accordingly, R.P. Martin Yen Broker 1 solicited the assistance of multiple members of the Yen Desk, who found counterparties for the wash trades and telephoned additional Yen-LIBOR submitters to ensure their Yen-LIBOR submissions were consistent with former UBS Senior Yen Trader Hayes manipulative requests.
- 366. For example, on September 18, 2008, former UBS Senior Yen Trader Hayes offered R.P. Martin \$50,000 or \$100,000 or more in commissions for his assistance in the manipulation of Yen-LIBOR:

"if you keep 6s unchanged today I will do fucking one humongous deal with you ... Like a 50,000 buck deal whatever. I need you to keep it as low as possible ...

I'll pay you, you know, 50,000 dollars, 100,000 dollars ... whatever you want. .. I'm a man of my word."

- 367. Less than a week later, on September 24, 2008, upon the apparent success of R.P. Martin, former UBS Senior Yen Trader Hayes used R.P. Martin Yen Broker 1 to engage in a series of "wash" trades with several derivatives traders at other panel banks to generate the promised \$50,000 in commissions and fees for R.P. Martin.
- 368. Once the switch and wash trades became a regular practice, Broker Defendants would proactively line up these sham transactions with other Hayes co-conspirators. For example, according to Hayes, "basically Noel [Cryan] would say can you do a switch trade? And I'd say yeah." This was especially true near the end of the quarter, when extra commission would help a Broker Defendant hit their budget, resulting in larger bonuses for the individual brokers. As Hayes described his relationship with R.P. Martin, "[t]he whole desk, I mean like when it came to end of the quarter and they were short of hitting their budget you know, the whole desk knew the score. The whole desk, you know, like wanted Terr [Farr] to go in and try and do some big trades with me so that they, like hit budget and got their bonuses or whatever you know."
- 369. Counterparties for wash trades and switch trades were easy to find. Much like the Broker Defendants, who were willing to help Hayes and his co-conspirators manipulate Yen-LIBOR and Euroyen TIBOR in exchange for extra commission payments, traders at other Contributor Banks Defendants, including RBS and JPMorgan, were always willing to engage in sham transactions so long as they too were compensated. Compensation usually took two forms (1) entertainment, .e.g., a trip to Las Vegas; and (2) "gift trades," i.e., the best deal coming through the broker's desk, which would be shown only to the broker's best customers.

- 370. According to Hayes one Euroyen-based derivatives trader in particular, Neil Danzinger ("Danzinger") from Defendant RBS, was always happy to engage in wash trades or switch trades in exchange for free entertainment. As Hayes explained, brokers typically spent about 5% of their brokerage revenue entertaining clients. Danzinger, who preferred to put his wash trades through Tullet Prebon, knew that the more in commission he generated for Tullet, the more they would be willing to spend entertaining him. Since the excess commissions was being paid with RBS' money, it was a win-win for Danzinger and Hayes, who benefited not only from the positive impact their manipulative conduct had on their respective trading books, but also from whatever kickbacks the Broker Defendants threw their way for paying excess commission.
- 371. Hayes' superiors were aware of and expressly approved his use of wash trades and switch trades to compensate the Broker Defendants for their assistance in manipulating Yen-LIBOR and Euroyen TIBOR. Hayes explained in his SFO interview, that after his first switch trade with R.P. Martin, he went to his direct boss, Michael Pieri, to discuss what had happened. Pieri was fine with this conduct. In a follow up conversation, Hayes explained "[i]t was clear to me and to Mike that we were doing this for, like, for, well, what I would have almost said was legitimate reasons to try and make the bank more money...So if the bank was paying out brokerage it was getting it back in other ways."

3. UBS Paid a Special "Bonus" To Broker Defendant ICAP

372. UBS, and in particular former UBS Senior Yen Trader Hayes, were significant clients of the Broker Defendants. Former UBS Senior Yen Trader Hayes steered a considerable amount of business toward the Broker Defendants, resulting in substantial bonuses based on the amount of commissions his business generated for the Broker Defendants. For example, beginning in June 2007, UBS paid Broker Defendant ICAP a monthly fixed fee that averaged

between 70,000 GBP and 85,000 GBP per month (US \$126,000 and US \$153,000) for brokerage services performed on behalf of Hayes. As a result, between April 2007 and March 2009, former UBS Senior Yen Trader Hayes singlehandedly accounted for, on average, approximately fourteen percent (14%) of ICAP's Yen Desk's business (although at times, he accounted for as much as twenty percent (20%) of ICAP's Yen Desk's business), making him ICAP's Yen Desk's biggest individual client. UBS was ICAP's Yen Desk's overall largest client from October 2006 through January 2011, accounting for, on average, approximately twenty-three percent (23%) of ICAP's Yen Desk's revenue between April 2007 and March 2009 (although at times, it accounted for as much as thirty percent (30%) of the Desk's revenue).

- 373. In addition, former UBS Senior Yen Trader Hayes also acted as the counterparty to many transactions facilitated by certain ICAP brokers, thus further increasing the commissions earned by ICAP's Yen Desk. The Yen Desk earned a fixed fee from UBS, but also received commissions based on the notional value of the transactions from the counterparties to former UBS Senior Yen Trader Hayes's trades. Because he brought significant business to the Yen Desk, losing former UBS Senior Yen Trader Hayes's business would have been, as stated by one ICAP Yen broker, "a significant loss."
- 374. Due to the quickly increasing demands for more substantial compensation by ICAP Cash Broker 1, by as early as the summer of 2007 UBS, at the urging of Hayes, agreed to increase its monthly fee by \$9,000, at least partly in recognition of the "LIBOR services" or the "fixing service" offered to former UBS Senior Yen Trader Hayes, which ICAP's Yen Desk Head provided to Cash Broker 1 quarterly as a bonus.
- 375. ICAP Yen brokers and Hayes believed that Cash Broker 1 was very effective in disseminating false Yen-LIBOR information through the provision of the skewed Suggested

LIBORs and his direct contacts with Yen-LIBOR submitters and traders at panel banks.

Initially, as Hayes began making his requests in late 2006, ICAP Cash Broker 1 agreed to skew his Suggested LIBORs for promises of an occasional champagne, lunch or dinner, such as "copious amounts of curry," or "bubbly." ICAP Derivatives Broker 1 constantly used flattery to persuade the Cash Broker 1 to modify his LIBOR recommendations, referring to him in these emails as "Lord Libor," "M'Lord" and "Lord Bailiff" (Cash Broker 1 also referred to himself in the third person using the same nicknames). But, flattery was not enough. The Derivatives Broker 1, Yen Desk Head and former UBS Senior Yen Trader Hayes also tried to appease him by giving him a trade with UBS on occasion to intermediate, for which he would earn a broker's commission. For example:

January 25, 2007:

<u>Cash Broker 1</u>: I hear through the vine you have a good month.

Hows my bonus pot looking? Mlord libor

Yen Desk Head: will push one your way today

Cash Broker 1: Ok chief....thks And im pushing 6mos as low

as I can!!

376. ICAP Cash Broker 1's demand for greater compensation in return for his skewed Suggested LIBORs quickly escalated, and he threatened to stop providing the "LIBOR services," as Hayes's requests became more persistent and demanding of accommodation. As the examples below demonstrate, the ICAP Yen Desk Head matter-of-factly called Cash Broker 1's demands as requests for "kick backs," and Hayes recognized that Cash Broker 1 was making him "loads of money."

April 18, 2007 (emphasis supplied)

Cash Broker 1: Hi [Yen Desk Head] with ubs how much does

he appreciate the yen libor scoop? It seems to me that he has all his glory etc and u guys get his support in other things. I get the drib and drabs. Life is tough enough over here without having to double guess the libors every morning and get zipper-de-do-da. How about some form of performance bonus per quarter from your b bonus pool to me for the libor service ...

Yen Desk Head:

Lord Baliff, I would suggest a lunch over golden week. Monday or Tuesday if you are around.... As for kick backs etc we can discuss that at lunch and I will speak to [Senior Yen Trader] about it next time he comes up for a chat.

377. ICAP's Yen Desk Head and Derivatives Broker 1 pressed Hayes about paying Cash Broker 1 an additional bonus. Hayes readily agreed, and as a result of Hayes's efforts within UBS to get recognition for the "LIBOR services" that Cash Broker 1 provided to him, ICAP successfully re-negotiated its fixed fee contract with UBS in July 2007 to increase its monthly fixed fee by an additional 5,000 GBP (US \$9,000). The ICAP Yen Desk awarded this amount as a quarterly bonus to Cash Broker 1, and retained the rest as additional bonuses and compensation for the ICAP Yen Desk.

378. Periodically, when the Yen-LIBOR fixing did not move in the direction he requested, Hayes threatened to take UBS business from ICAP. In response, ICAP Derivatives Broker 1 and Yen Desk Head urgently pressed Cash Broker 1 to modify his Suggested LIBORs. For example, on June 28, 2007, Cash Broker 1 was resisting sending a revised Suggested LIBOR reflecting Hayes's preferred six-month rate, after he had already distributed the day's Run Thru. Derivatives Broker 1 and Yen Desk Head had the following exchange (exclamation by all-capital letters in original):

Derivatives Broker 1:

[Yen Desk Head] THIS IS GETTING
SERIOUS [Hayes] IS NOT HAPPY WITH
THE WAY THINGS ARE PROGRESSING
HE IS GOING TO HAVE A WORD WITH
[Competing Broker] TO RECTIFY THE
SITUATION. CAN YOU PLEASE GET
HOLD OF [Cash Broker 1] AND GET HIM
TO SEND OUT 6 MOS LIBOR AT 0.865
AND TO GET HIS BANKS SETTING IT
HIGH. THIS IS VERY IMPORTANT
BECAUSE HE IS QUESTIONING MY
(AND OUR) WORTH ... GET 6MOS HIGH
PLEASE.

Yen Desk Head:

mailed him spoke to him, he realises that the carrot might go if this carries on

379. Ultimately, Cash Broker 1 sent the demanded revised Run Thru with the sixmonth Suggested Yen-LIBOR at the level requested by former UBS Senior Yen Trader Hayes, 0.865.

380. In early 2009, former UBS Senior Yen Trader Hayes made good on his threat to take business elsewhere when he was not completely satisfied. At the end of 2008, ICAP Derivatives Broker 1 retired for a brief period. Former UBS Senior Yen Trader Hayes then moved some of his business to another interdealer broker ("Broker B") because he believed Broker B was more responsive to his requests to manipulate Yen-LIBOR. Upon Derivatives Broker 1's return to work in April 2009, he restored the relationship by ensuring that former UBS Senior Yen Trader Hayes's Yen-LIBOR requests were transmitted to Cash Broker 1 on a regular basis:

April 28, 2009:

Senior Yen Trader: need 6m up big time when 6m goes over the

turn ...

<u>Derivatives Broker 1</u>: ... i'll get to work on [Cash Broker 1]

Senior Yen Trader: thx ...

Derivatives Broker 1: ok with you, hasve you asked [Cash Broker 1]

for his opinion yet?

Senior Yen Trader: no to be honest [Derivatives Broker 2] is too

busy he has too many lines i really rarely get [Cash Broker 1's] insoght i rely on [Yen

Broker at Broker B] more now

Derivatives Broker 1: ok we can remedy that :-(i'll give them a kick

up the ar se and contact [Cash Broker 1] direct

Senior Yen Trader: yeah would be better

F. Rabobank Colluded with Broker Defendants ICAP and R.P. Martin to Manipulate Yen-LIBOR to Benefit Rabobank's Euroyen-Based Derivatives Positions.

- 381. Despite awareness of an investigation related to LIBOR, Rabobank continued its efforts to manipulate Yen-LIBOR to benefit its Euroyen-based derivatives positions. Rabobank now began to use the Broker Defendants to facilitate the manipulation.
- 382. On November 30, 2010, in the midst of the CFTC's investigation of Rabobank's U.S. Dollar LIBOR submission practices, Rabobank Senior Manager 2 instructed the Yen-LIBOR submitters at that time, Yen Trader-Submitter 3 and Yen Trader-Submitter 4, that it was improper to consider rate requests from traders when making Rabobank's LIBOR submissions and that the practice should stop. That same day, when Rabobank's Senior Yen Trader sent the daily Yen-LIBOR rates to be submitted, the Yen-LIBOR submitters refused to assist him.

 Reacting to the loss of his ability to influence the Yen-LIBOR fixings directly, the very next day Rabobank's Senior Yen Trader contacted Broker Defendant ICAP ("ICAP Cash Broker") and requested his assistance in manipulating Yen-LIBOR to benefit the Rabobank Senior Yen Trader admitted to the

ICAP Cash Broker that he previously acted as Rabobank's Yen-LIBOR submitter and "influence[d]" the LIBOR submissions until November 30, 2010.

- 383. The Rabobank Senior Yen Trader continued to request the ICAP Cash Broker's assistance in his manipulative efforts throughout the end of 2010 and into early 2011. For example, on December 1, 2010, the Rabobank Senior Yen Trader wanted three-month and six month Yen-LIBOR "down" on December 2. ICAP readily acquiesced and promised to "work some magic" to lower three-month and six-month Yen-LIBOR.
- 384. On at least two occasions, Rabobank also communicated with another broker at Broker Defendant R.P. Martin and sought R.P. Martin's assistance in manipulating Yen-LIBOR. For example, on one of these occasions, on January 19, 2011, Rabobank requested R.P. Martin's assistance in pushing the six-month Yen-LIBOR fixing in a favorable direction to benefit Rabobank's Euroyen-based derivatives positions.

1. Rabobank Colluded with Broker Defendant R.P. Martin to Aid UBS's Manipulation

385. The Rabobank Senior Yen Trader-Submitter communicated with Broker

Defendant R.P. Martin to discuss the Yen market generally and Yen-LIBOR fixings in particular.

From at least May 2008 through at least September 2008, R.P. Martin asked the Rabobank

Senior Yen Trader-Submitter at times to make particular Yen-LIBOR submissions, and on at least one occasion stated that the request was intended to benefit the derivatives trading positions of former UBS Senior Yen Trader Hayes, who was also a client of R.P. Martin. During the same period, the Rabobank Senior Yen Trader-Submitter also informed R.P. Martin that he received requests for particular Yen-LIBOR submissions for certain tenors from the Rabobank Senior Yen Trader. On at least one occasion, the Rabobank Senior Yen Trader-Submitter indicated he would accommodate R.P. Martin's Yen-LIBOR request on behalf of former UBS Senior Yen Trader

Hayes along with the rate preference of the Rabobank Senior Yen Trader when making Rabobank's Yen-LIBOR submissions on that particular day.

386. The below example reveals "back scratching," *i.e.*, explicit agreements by coconspirators to submit artificial Yen-LIBOR rates to financially benefit other co-conspirators' Euroyen derivatives positions in return for the other co-conspirators' agreement to return the favor sometime in the future. On July 18, 2008, R.P. Martin reached out to Rabobank to ask where Rabobank planned on setting its one-month Yen-LIBOR that particular day. The Rabobank Senior Yen Trader-Submitter had not yet been told where to set Rabobank's one-month Yen-LIBOR and R.P. Martin requested Rabobank set one-month Yen-LIBOR at "65" or "as low as possible basically" at the behest of a "geezer at UBS [Thomas Hayes]." The Rabobank Senior Yen Trader-Submitter agreed and went further by saying that Rabobank will set its one-month Yen-LIBOR at .63 so long as R.P. Martin let UBS know in order for UBS to "scratch [Rabobank's] back" in the future. R.P. Martin promised to "definitely" let UBS know in order to "play by the rules." Consistent with his agreement to do so, Rabobank's one-month Yen-LIBOR submission on July 18, 2008 was .63.

G. RBS Manipulated Yen-LIBOR through Brokers and Engaged in Wash Trades to Compensate the Broker Defendants for Their Assistance.

387. By January 2007, RBS Yen Trader 1 came to suspect that UBS was using interdealer brokers to manipulate Yen-LIBOR. At that time, RBS Yen Trader 1 commented to another RBS trader, stating: "do you think brokers go and tell small banks where it should be?[...] on behalf of the bigger banks i could imagine UBS telling the brokers to go and get all the small banks to mark libor up." Several months later, in August 2007, RBS Yen Trader 1 commented again to UBS Senior Yen Trader Hayes about information he learned from R.P.

Martin Broker B, "i was out with [R.P. Martin Broker B] yesterday every day [UBS Yen Trader] comes down and asks the jpy desk to tell all the banks to set [Yen] libor low."

388. Beginning a year later, from September 2008 to August 2009, as requested by at least two interdealer brokers, R.P. Martin Brokers B and C, RBS Yen Trader 1 agreed to execute wash trades with UBS to generate additional commission for R.P. Martin Brokers B and C in recognition of helping UBS Senior Yen Trader Hayes manipulate Yen-LIBOR.

389. RBS paid brokerage commissions on some of these wash trades to maintain good relationships with the interdealer brokers. For example, on September 19, 2008, R.P. Martin asked RBS Yen Trader 1 for a "favour" to enter into a "switch" or wash trade with UBS because UBS wanted to pay R.P. Martin "some bro." In exchange for entering the wash trade with UBS, R.P. Martin promised to send around lunch to the RBS desk because the trade was so large. The exchange between Interdealer Broker B [R.P. Martin] and RBS Yen Trader 1 is below:

September 19, 2008:

<u>R.P. Martin Broker B</u>: can you do me a favour ... you're not going to get

paid any bro for this and we'll send you lunch around for the whole desk. Can you flat ... can you switch two years semi at 5 3/4, 100 yards [meaning 100 billion] ... between UBS. Just get ... take it from UBS, give it back to UBS. He wants to pay some

bro. We won't bro you ...

Yeah, yeah.[...]

R.P. Martin Broker B: Yeah. Yeah. 100 yards ... actually can you make it

150 and I'll send lunch around for everybody?

Yen Trader 1: Yeah.

R.P. Martin Broker B: Thanks very much. Cheers, mate and you

choose lunch.

- 390. That same day, R.P. Martin asked RBS Yen Trader 1 to enter an addition 100 billion Yen in wash trades with UBS so that Hayes could pay approximately \$31,000 in brokerage fees to R.P. Martin as compensation for R.P. Martin's assistance with the manipulation of Yen-LIBOR. By agreeing to do so, RBS Yen Trader 1 knowingly assisted the UBS Yen Trader's manipulation because he helped ensure that the interdealer broker was compensated.
- 391. RBS Yen Trader 1 also eventually asked R.P. Martin, on at least one occasion, to influence other panel banks' Yen-LIBOR submissions to benefit the trading positions of RBS Yen Trader 1. On June 26, 2009, RBS Yen Trader 1 asked R.P. Martin where UBS wants Yen-LIBORs to be "put" on this particular day. R.P. Martin tells RBS that UBS wants the one-month and three-month Yen-LIBOR "a little bit lower" and wants the six-month Yen-LIBOR "probably about the same where they are now." RBS, however, asked R.P. Martin to assist in lowering six-month Yen-LIBOR. R.P. Martin readily agrees saying "alright....we'll work on it." Later that same day, R.P. Martin reported back to RBS Yen Trader 1 that the R.P. Martin "team" spoke with unidentified Bank F, Bank G, Bank H and Bank I and "a couple of other people" to lower six-month Yen-LIBOR:

R.P. Martin Broker B: Hello mate, [Yen Trader 1]? You all set?

Yen Trader 1: Yeah.

R.P. Martin Broker B: Alright okay, alright listen, we've had a couple

words with them. You want them lower, right?

Yen Trader 1: Yeah.

R.P. Martin Broker B: Alright okay, alright, no we're okay just confirming

it. We've, so far we've spoke to [Bank F]. We've spoke to a couple of people so we'll see where they

come in alright. We've spoke, basically one

second, basically we spoke to [Bank F], [Bank G],

[Bank H], who else did I speak to? [Bank I]. There's a couple of other people that the boys have spoke to but as a team we've basically said we want a bit lower so we'll see where they come in alright?

Yen Trader 1: Cheers.

R.P. Martin Broker B: Cheers no worries mate.

392. Yen Trader 1 then executed a wash trade with UBS to compensate R.P. Martin for its assistance, generating about \$20,000 in commissions for R.P. Martin.

H. <u>Deutsche Bank Used Interdealer Brokers to Disseminate False Information Into</u> the Yen-LIBOR and Euroyen TIBOR Market

- 393. Deutsche Bank colluded with multiple Broker Defendants to disseminate false market information to the Euroyen market to manipulate Yen-LIBOR and Euroyen TIBOR. For example, on September 26, 2008, Submitter-7 messaged interdealer Broker A-1, requesting that Broker A-1 get his Yen-LIBOR Contributor Bank clients to lower three-month Yen-LIBOR. Submitter-7 stated, "3 mth libor today? . . . any chance to get it lower or some resistance" Broker A-1 replied, "ill try prob Monday can get it lower."
- 394. Deutsche Bank also colluded with interdealer Broker B. For example, on July 10, 2009, Deutsche Bank and Broker B manipulated Yen-LIBOR artificially higher: Trader-11 messaged Broker B-1 in an electronic chat, "Morning libor to the roof today please," to which Broker B-1 replied, "yeah looks that way dude."

- I. The Contributor Bank Defendants Colluded Directly with One Another To Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives
 - 1. UBS's Collusion with Other Panel Banks⁵⁹
- 395. Hayes augmented his internal efforts to manipulate Yen-LIBOR and Euroyen TIBOR for multiple tenors and the prices of Euroyen-based derivatives by coordinating with derivative traders at other panel banks. Thus, former UBS Senior Yen Trader Hayes wanted to better exploit the averaging methodology used to calculate fixings by increasing the likelihood that more than one corrupted submission would be included in, or could impact, the official daily fixing of Yen-LIBOR and Euroyen TIBOR.
- 396. Hayes began coordinating regularly with derivatives traders at other panel banks by January 2007. Hayes coordinated with traders primarily at four panel banks whom he knew or had worked with previously. Hayes, or others acting on his behalf, made hundreds of requests to traders at the other panel banks. Hayes generally made requests of the other banks' traders, who regularly agreed to pass his requests to their Yen-LIBOR or Euroyen TIBOR submitters. Former UBS Senior Yen Trader Hayes also made requests directly of the submitter of at least one bank. The other traders often conveyed success with comments such as, "done" and "we normally do well for u!!!"
- 397. For their own manipulative purposes of benefiting their Euroyen-based derivatives trading positions, certain of the derivatives traders at the other banks sought reciprocating assistance from Hayes to make requests on their behalf to UBS's submitters. Hayes readily agreed to help them and often encouraged them to ask for help as a way to curry favor and ensure his requests were accommodated.

⁵⁹ See also Ex. A-2, pp. 17-20.

- 398. Numerous communications between Hayes and derivatives traders at the other panel banks reveal:
 - o descriptions of Hayes's strategy and his success in keeping Euroyen rates "artificially high;"
 - o how, as with the internal requests, Hayes pressed traders at the other banks for assistance particularly on key fixing dates around the IMM dates or the turn of the calendar year;
 - how traders believed that Yen-LIBOR was vulnerable to manipulation and routinely submitted requests for artificial Yen-LIBOR submissions to benefit their derivatives positions;
 - o that communications requesting false Yen-LIBOR submissions frequently covered a range of days, such that a single request could result in multiple days of artificial Yen-LIBOR submissions impacting the published Yen-LIBOR during the same period;
 - o the pressure Hayes felt to keep making money for UBS; and
 - o that the traders believed they succeeded at times.
- 399. On February 2, 2007, former UBS Senior Yen Trader Hayes described this method of manipulating Yen-LIBOR in an electronic chat with his counterpart Yen derivatives trader ("Trader-A1") at another Contributor Panel bank ("Bank-A"):

<u>Hayes</u>: 3[month Yen] libor is too high cause I have kept it artificially high

Trader-A1: how[?]

Hayes: being mates with the cash desks, [another Contributor Panel bank,

("Bank-C") and I always help each other out too.

Trader-A1: that's useful to know.

400. By April 2007, Hayes had requested Trader-A1 to solicit Bank-A LIBOR submitters to contribute submissions which benefited UBS's Yen trading positions. For example, in an April 20, 2007 electronic chat, Hayes stated to Trader-A1: "I know I only talk to you when I need something but if you could ask your guys to keep 3m [Yen-LIBOR] low wd be massive help as long as it doesn't interfere with your stuff . . . tx in advance."

401. Approximately 30 minutes later former UBS Senior Yen Trader Hayes and Trader-A1 had the following chat:

<u>Hayes</u>: mate did you manage to spk to your cash boys?

<u>Trader-A1</u>: yes u owe me they are going 65 and 71

<u>Hayes</u>: thx mate yes I do . . . in fact I owe you big time

- 402. Approximately 45 minutes later, after checking to see if Bank-A lowered its 3-month Yen-LIBOR submission to 65, Hayes sent the following message to Trader-A1: "Mate they set 64! . . . that's beyond the call of duty!"
- 403. Hayes also contacted Yen derivatives Trader-B at Bank-B⁶⁰ to request Yen-LIBOR submissions that would benefit UBS's Yen trading positions. For example, on May 21, 2009 Trader-1 asked Trader-B: "cld you do me a favour would you mind moving you 6m [Yen] libor up a bit today, I have a gigantic fix." Trader-B who also sometimes acted as the Yen-LIBOR submitter for Bank-B responded "I can do that." As promised, Trader-B raised Bank-B's 6-month Yen-LIBOR submission by six (6) basis points that day.
- 404. Hayes also asked his counterpart Yen derivatives trader ("Trader-C") at a third Contributor Panel bank ("Bank-C") to have Bank-C contribute Yen-LIBOR submissions to benefit UBS's Yen derivatives trading positions. For example, in a January 29, 2007 electronic chat with Trader-1, Trader-C asked: "[A]nything you need on [Yen] libors today? High 6m [Yen-LIBOR] would help me." Hayes responded, "high 3m I'll sort our 6m rate for you thanks." As promised, Hayes made a request to the UBS Yen-LIBOR submitter for a high 6-month contribution.

⁶⁰ Upon information and belief, Bank B is Defendant Deutsche. Deutsche was the only Yen-LIBOR Contributor Bank to raise its Yen-LIBOR submission by 6 basis points: 0.65 (on May 20) to 0.71 (on May 21).

405. As a final example, Hayes also contacted Yen derivatives Trader-D at a fourth Yen-LIBOR panel bank, Bank-D, in an effort to influence Bank-D's Yen-LIBOR submissions for the benefit of UBS's Euroyen-based derivatives positions.

406. On June 28, 2007, in an electronic chat with Trader-D, former UBS Senior Yen Trader Hayes asked: "pls ask ur mate for high 6m [Yen-LIBOR] mate . . . wd be really really grateful." Trader-D responded: "will do, for the record he's def not my 'mate'!... but I'll [send him an electronic chat]." As requested, approximately 15 minutes later, Trader-D sent an electronic chat to the Bank-D Yen-LIBOR submitter stating, "high 6m yen libor would be gd according to my brother!" The Yen-LIBOR submitter responded, "WILL DO MY BEST."

407. Hayes knew that coordinating with other Contributor Panel Banks to manipulate Yen-LIBOR and Euroyen-based derivatives prices was wrong. In a July 22, 2009 electronic chat with Broker-A1, Hayes described his plan to coordinate Yen-LIBOR submissions with other Contributor Panel Banks over the next few weeks while staggering drops in submissions so as to avoid detection:

> 11th aug is the big date . . . i still have lots of 6m [Yen-Hayes:

> > LIBOR] fixings till the 10th

Broker-A1: if you drop your 6m [Yen-LIBOR] dramatically on the

> 11th mate, it will look v fishy, especially if [Bank D] and [Bank B] go with you. I'd be v careful how you play it, there might be cause for a drop as you cross into a new month but a couple of weeks in might get people

questioning you.

don't worry will stagger the drops . . . ie 5bp then 5bp Hayes:

ok mate, don't want you getting into sh it Broker-A1:

Hayes: us then [Bank B] then [Bank D] then us then [Bank B] then

[Bank D]

<u>Broker-A1</u>: great the plan is hatched and sounds sensible

2. RBS Admitted To Colluding with UBS to Manipulate Yen-LIBOR⁶¹

408. At least as early as February 2007, an RBS derivatives trader, Trader-3, and former RBS and UBS Senior Yen Trader Hayes agreed to request that their respective Yen-LIBOR submitters contribute Yen-LIBOR submissions to benefit their Euroyen-based derivatives positions. In 2008, Hayes and another RBS trader, Trader-6, agreed to make requests to benefit Hayes's trading positions, and, in 2010, after Trader-6 had left RBS and moved to an interdealer broker, Hayes enlisted Trader-6 to convey requests to RBS for the purpose of influencing RBS's Yen-LIBOR submissions.

409. As early as February 2, 2007, Trader-3 knew that Hayes communicated with another Contributor Panel bank, Bank-A, as part of Hayes's effort to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives. In an electronic chat that day, Hayes stated:

Hayes: ...3m libor is too high cause i have kept it artificially high.

Trader-3: how

Hayes: being mates with the cash desks, [Bank-A] and i always

help each other out . . . too.

Trader-3: ok thats useful to know. . .

410. On numerous occasions in 2007, Hayes requested that Trader-3 ask the RBS Yen-LIBOR submitter to move RBS's Yen-LIBOR submission in a particular direction (*i.e.*, up or down) or to contribute a particular LIBOR submission in order to benefit Hayes's Euroyen-based derivatives positions. Trader-3 often agreed to make the request. On a few occasions, Trader-3

⁶¹ See also Ex. B-4, pp. 19-21.

similarly requested that Hayes ask UBS's Yen-LIBOR submitter to make a contribution that would benefit Trader-3's Euroyen-based derivatives positions, and Hayes agreed to make the requests.

411. For example, over a period of approximately ten days in February 2007, Hayes and Trader-3 discussed lowering the 1-month Yen-LIBOR to benefit their Euroyen-based derivatives positions, in addition to coordinating requests in other tenors. In an electronic chat on February 8, 2007, Hayes requested that Trader-3 ask RBS's Yen-LIBOR submitter to contribute a low 1-month Yen-LIBOR submission:

<u>Hayes</u>: can you do me a huge favour, can you ask your cash guys

to set lm libor low for the next few days . . . i'll return the favour as when you need it ... as long as it doesn't go against your fixes . . . have 30m jpy of fixes over the next

few days

Trader-3: yeah i will try

412. Later in the same chat, Hayes noted that he "lost lots today. . . hence really need a hand on lm [Yen] lib . . . pls don't forget." Trader-3 responded, "ok i will try my best." Trader-3 and Hayes then discussed other topics, and at the end of the conversation, Hayes reminded Trader-3 of his request for a low 1-month Yen-LIBOR:

Hayes: oh well i am off home dreaming of a low lm [Yen] libor!

<u>Trader-3</u>: good luck what sort fo level do u want

<u>Hayes</u>: if you can get a .42 six that wd be great . . . fix . . . not six

Trader-3: 0 .42

Hayes: thats the one!

Trader-3: ok will speak to me guy in a sec

- 413. The next day, in an electronic chat dated February 9, 2007, Hayes thanked Trader-
- 3. The two traders discussed whether their Euroyen-based derivatives positions, and thus their preferred Yen-LIBOR levels, were aligned, and Hayes requested a low fixing:

<u>Hayes</u>: thx help lm [Yen-LIBOR] y/day appreciated

Trader-3: no worries

* * * *

Hayes: can you ask for a low lm [Yen-LIBOR] again today pls if

ok? . . . todays fix is 12m . . . you need anything on 3m or

m?

<u>Trader-3</u>: no my book is still tiny i will go for low [Yen] libor again

... it suits me too as i am short the spreads

<u>Hayes</u>: ok thanks

414. Later in the same chat, Trader-3 and Hayes discussed their mutual interest in low 1-month and other Yen-LIBOR submissions, and Hayes told Trader-3 that he would contact Bank-A as well:

Trader-3: i told my cash guy i want low lm and 3m fixes and high 6

m that suits uu right

<u>Hayes</u>: yes absolutely, is that ok with you? we will be exactly the

same . . . am going to talk to [Bank-A] as well

Trader-3: perfect

Hayes: cool . . . you in monday?

<u>Trader-3</u>: yeah a bit

<u>Hayes</u>: ok get them to set the same fixes monday as well if ok

<u>Trader-3</u>: sure

- 415. On February 13 and, 14, 2007, Hayes again requested that Trader-3 ask RBS's Yen-LIBOR submitter for a low 1-month Yen-LIBOR contribution, and informed Trader-3 that Hayes would continue to need a low 1-month Yen-LIBOR until February 15, 2007.
- 416. In an electronic chat on February 15, 2007, Hayes requested that Trader-3 make a request to the RBS Yen-LIBOR submitter for low 1-month and high 6-month submissions, and Trader-3 agreed to do so:

<u>Hayes</u>: can you ask for a low lm fix again ...wd really help

* * * *

<u>Trader-3</u>: sure it suite me to get low 1s and s . . . 3s

Hayes: thanks need high 6's tho if ok with you?

Trader-3: i have got nothing in 6s until the 19 fix date when i need a

high one too

Hayes: ok thx [Trader-3]

Trader-3: so yeah thats fine with me my cash guy is rubbish at

guessing where [Yen] libors are going to be but he listens

to what i say

Hayes: thats a releif [sic]

- 417. Later that same day, Trader-3 asked Hayes "how many people can you get to put this lm [Yen] libor low." Hayes responded, "well us [Bank-A] and a few others i think."
- 418. Within minutes of this exchange, Hayes asked a UBS Yen-LIBOR submitter to contribute a low 1-month and 6-month Yen-LIBOR submission. Hayes then asked the UBS submitter if he knew anyone at another Contributor Panel bank that he "could have a word with . . . as a favour." The submitter replied that he lacked that "edge" but suggested that Hayes "have a word with [Bank-A]." In response, Hayes stated that he had "already done that . . . and rbs."

- 419. Hayes occasionally communicated to Trader-3 his expectations about the direction of an upcoming UBS Yen-LIBOR submission. In an electronic chat on February 26, 2007, for example, Hayes asked, "can you try to get your guys to leave their 3m and lm [Yen] libors unchanged." Trader-3 responded, "yeah i want low ones so that suits me." Hayes replied by communicating UBS's intention: "gd thx mate ... we are going low too."
- 420. On a few occasions, Trader-3 also requested that Hayes ask the UBS Yen-LIBOR submitter to contribute a particular submission or to move UBS's submission in a particular direction (i.e., up or down) in order to benefit Trader-3's trading positions, and Hayes agreed. In an electronic chat on March 2, 2007, the following exchange occurred:

Trader-3: please please low 6m [Yen-LIBOR] fix on monday . . . i

have got a [b]ig fix

Hayes: sure no worries

* * * *

<u>Hayes</u>: how big is the fix mate?

<u>Trader-3</u>: 100 us big for me

Hayes: 10m jpy? . . . yes thats quite lrge 200b 6m

421. On March 6, 2007, Trader-3 had the following exchange with Hayes in an electronic chat:

<u>Trader-3</u>: yeah can u go fr low everything plse . . . i am

<u>Hayes</u>: will do cld do with high threes but won't get it we are the

lowest

422. Later that morning, consistent with the request he received from Trader-3, Hayes had the following exchange with UBS's Yen-LIBOR submitter:

<u>Hayes</u>: hi pls don't forget low lm and 6m!:)... have lots fixing

UBS submitter: mate i won't

- 423. On a few occasions, Trader-3 reported back to Hayes that he expected Submitter-1 to accommodate a request. In an electronic chat on April 20, 2007, Hayes requested that Trader-3 ask RBS's Yen-LIBOR submitter for a low 3m Yen-LIBOR submission. *See* App. at 33, ¶ 83.
 - 424. Hayes' requests to Trader-3 continued at various times throughout 2007.
- 425. Trader-3's dealings with Hayes were noted by others at RBS. In an electronic chat on March 27, 2008, Trader-1 asked Trader-2 whether Trader-3's request for a lower submission was done at Hayes's request:

<u>Trader-1</u>: we change the [Yen] libor lower?

<u>Trader-2</u>: [Trader-3] asked [a junior backup submitter] to put it low

Trader-1: does he need it or Tom Hayes ask him to do it? . . . cos

UBS wanted low

- 426. During 2008, Hayes, as he had with Trader-3, asked Trader-6 to request that RBS's Yen-LIBOR submitter contribute RBS's Yen-LIBOR submissions at levels that benefitted Hayes's (and UBS's) Euroyen-based derivatives positions.
 - 427. Trader-6 and Hayes had the following exchange by email on May 7, 2008:

<u>Hayes</u>: Hi [Trader-6] . . . can you please ask for a low 6m in jpy for

the next few days. Hope you are ok, was good seeing you

last week

Trader-6: Hi mate, I mentioned it to our guy on Friday and he seemed

to have no problem with it, so fingers crossed.

428. A similar electronic communication occurred on November 3, 2008:

Hayes: can you do me a favour and ask your guys for a low JPY

3m fix today if they can? . . . wld be massiive help

<u>Trader-6</u>: will ask

Hayes: have monster fix . . . thanks [Trader-6]

429. In or around July 2009, Trader-6 left RBS, and subsequently began working for an interdealer brokerage firm ("Brokerage-A") as a cash broker. While at Brokerage-A, Trader-6 maintained his relationship with Submitter-1 at RBS, and continued to assist Hayes in Hayes's efforts to influence RBS's Yen-LIBOR submissions.

430. For instance, on March 3, 2010, Hayes (who by that time had left UBS and joined Bank-B)⁶² had the following exchange with Trader-6, who was now employed as a broker with Brokerage-A:

Hayes: i really need a low 3m Yen-LIBOR into the imm... any

favours you can get with [Submitter-1] would be much appreciated . . . even if he on;ly move 3m down lbp . . .

from 25 to 24

<u>Trader-6</u>: I'll give him a nudge later, see what he can do

<u>Hayes</u>: thanks mate . . . really really would appreciate that

Trader-6: haven't seen him since i left so I might buy him a steak to

catch up

Hayes: yeah

A little less than three hours later, Trader-6 and Submitter-1 had the following conversation:

<u>Trader-6</u>: can i pick ur brain?

<u>Submitter-1</u>: yeah

Trader-6: u see 3m Yen-LIBOR going anywhere btween now and

imm?

Submitter-1: looks fairly static to be honest, poss more pressure on the

upside, but not alot

⁶² Upon information and belief, Bank B is Defendant Citibank.

<u>Trader-6</u>: oh. we hve a mutual friend who'd love to see it go down,

no chance at all?

<u>Submitter-1</u>: haha TH[Thomas Hayes] by chance

<u>Trader-6</u>: shhh

<u>Submitter-1</u>: hehehe, mine should remain flat, always suits me if

anything to go lower as i reve funds

Trader-6: gotcha, thanks, and, if u cud see ur way to a small drop

there might be a steak in it for ya, haha

<u>Submitter-1</u>: noted ;-)

431. The next day, March 4, 2010, RBS's Yen-LIBOR submission moved down by one basis point, from 25 to 24, consistent with Hayes's request, prompting the following exchange between Trader-6 and Submitter-1:

<u>Submitter-1</u>: Libor lower ;-)

Trader-6: good work!!!!

432. Submitter-1 lowered RBS's Yen-LIBOR contribution another basis point on March 9, 2010, then dropped it another basis point two days later, tying one other Contributor Panel bank for the lowest Yen-LIBOR submission that day. RBS's Yen-LIBOR submission remained tied with one other Yen-LIBOR Contributor Panel bank submission through March 17, 2010, the March IMM fixing date originally referenced by Hayes. On March 17, 2010, RBS's Yen-LIBOR submission was 2.375 basis points below the BBA Yen-LIBOR fix.

3. Rabobank Admitted it had a Standing Agreement to Collude with Unidentified Bank B^{63}

433. From as early as May 2006 and continuing at least through October 2008, Submitter-4 and a trader ("Trader-B") at another Contributor Panel bank ("Bank-B")⁶⁴ had an

⁶³ See also Ex. D-2, pp. 22-24.

agreement that they would, upon request, contribute Yen-LIBOR submissions to benefit each other's Euroyen-based derivatives positions, or the Euroyen-based derivatives positions of other traders, whenever doing so did not adversely affect their own Euroyen-based derivatives positions. As Trader-B explained in an email forwarding a Yen-LIBOR submission request from Submitter-4 to the Yen-LIBOR submitters at Bank-B: "We usually try and help each other out...but only if it suits."

- 434. On June 27, 2006, for example, Submitter-4 communicated with Trader-B: "i need a high lmth today so i will be setting an obseenly high lmth." Trader-B responded: "sure mate no worries...give us an idea where and i'll try n oblige...;)," to which Submitter-4 replied: "ok great well at mo thinking of setting mine around 17." Trader-B accommodated Submitter-4's manipulation request, as Bank-B's one-month submission for that day was 0.17.
- 435. On July 6, 2006, Submitter-4 communicated with Trader-B: "for info i need a high lmth set today i will be setting something ridiclous like 28 or 29 for info." That day, Rabobank's 1-month Yen-LIBOR submission was 0.29, an increase of two basis points, making Rabobank's submission the highest submission on the Contributor Panel. Likewise, Bank-B's 1-month Yen-LIBOR submission also increased by two basis points.
- 436. On occasions when Submitter-4 or Trader-B was unable to, or failed to, accommodate the other's Euroyen-based derivatives positions, an effort was sometimes made to explain the attendant circumstances and to preserve their agreement. For example, on March 28, 2008, Submitter-4 preemptively contacted Trader-B to explain that their submissions would be at odds that day: "morning skip [Trader-5] has asked me to set high libors today gave me levels of lm 82, 3m 94....6m 1.02." Trader-B replied: "sry mate cant oblige today...i need em lower!!!"

⁶⁴ As revealed by Lloyds' settlement agreements, Bank-B is Defendant Lloyds.

Submitter-4 then explained: "yes was told by [a third party]...just thought i'd let you know why mine will be higher...and you don't get cross with me."

- 437. Similarly, on January 5, 2007, Trader-B explained how he had mistakenly failed to accommodate a manipulation request from Submitter-4: "just b4 you beat me up....I was in meeting so didn't do me libors today...thk they put .52 for 1s..." Submitter-4 answered: "hahah no thats fine thats what i set too cheers skip."
- 438. The agreement between Submitter-4 and Trader-B was also used to manipulate Yen-LIBOR to benefit other traders at both Rabobank and Bank-B. For example, on May 10, 2006, Submitter-4 made a manipulation request of Trader-B on behalf of Trader-4 for a low sixmonth submission: "re our conversation yesterday about libors...for info i've been asked by my Singapore man to help him out with a silly low 6m fixing today.. ...just for your info." Trader-B responded: "Tell him I'll do same if he gets me a job!!!!"
- 439. On July 27, 2006, Submitter-4 contacted Trader-B on behalf of Trader-5 to request a high one-month submission consistent with Rabobank's submission: "[Trader-5] wants a high lm fix from me today....am going to set .37." Trader-B agreed: "that suits mate," "so happy to ablige." Bank-B's submission jumped from 0.35 to 0.37 between July 26, 2006, and July 27, 2006, a move that took Bank-B's submission from being tied as the lowest submission on the Contributor Panel to being tied as the second highest submission on the Contributor Panel.
- 440. The following day, July 28, 2006, Submitter-4 and Trader-5 conferred internally regarding their mutual desires for another high fixing. Submitter-4 stated to Trader-5: "setting a high Im again today I need it!" to which Trader-5 responded: "yes pls mate...I need a higher Im libor too." Within approximately 20 minutes, Submitter-4 contacted Trader-B and stated: "morning skipper will be setting an obscenely high Im again today...poss 38 just fyi." Trader-B

responded, "(K)...oh dear..my poor customers....hehehe!! manual input libors again today then!!!!" Both banks' submissions on July 28, 2006, moved up one basis point, from 0.37 to 0.38, a move which again placed their submissions as the second highest submissions on the Contributor Panel that day.

- 441. Upon information and belief, Bank-B is Defendant Lloyds. On July 27, 2006, Lloyds was one of only two Yen-LIBOR Contributor Banks to move their one-month Yen-LIBOR submission up from .35 (July 26) to .37 (July 27). In addition, aside from Rabobank, Lloyds was the only other Yen-LIBOR Contributor Bank to move its one-month Yen-LIBOR submission up an additional basis point from .37 (July 27) to .38 (July 28).
- 442. As discussed, on March 19, 2008, Submitter-4 agreed to a request from Trader-5 and Trader-6 to submit a six-month Yen-LIBOR rate (1.10%) that Submitter-4 knew to be incorrect. Submitter-4 then contacted Trader-B pursuant to their understanding to request a similar manipulation of Bank-B's Yen-LIBOR submission for that day: "[Trader-5] needs a high 6m libor if u can help skip asked me to set 1.10!" Trader-B answered: "oops my 6s is 1.15!!!," "he'll love me," and "send him my regards the lovely fella....not heard from him in a while....." Again, upon information and belief, Bank-B is Defendant Lloyds as they were the only Yen-LIBOR contributor bank to submit six-month Yen-LIBOR at 1.15 on March 19, 2008.
- 443. Likewise, Trader-B had a July 19, 2007, telephone conversation with another trader at Bank-B ("Trader-C"), in which Trader-C made a manipulation request of Trader-B for three-month Yen-LIBOR, and Trader-B offered to extend Trader-C's manipulation request to Submitter-4:
 - <u>Trader-C</u>: I need a little favor today for what it's worth. I don't know what you've been doing in 3 months, but we've got like a fixing of 83 billion on Monday, [unintelligible] Low threes, [unintelligible]

<u>Trader-B</u>: What you want to do, what you want me to put low libor in, is that

what you are saying?

<u>Trader-C</u>: Yeah, low libor in the threes.

Trader-B: Yeah, 'course I can, mate. No worries at all.

Trader-C: That would be nice.

<u>Trader-B</u>: I'll have a word with [Submitter-4] as well, he'll drop it down for

you as well I'm sure, [unintelligible] It needs more than one, mate, trust me. [unintelligible] Where do you want it? And I'll just pitch

it wherever you want, [unintelligible]

<u>Trader-C</u>: Um...roughly where it was yesterday, that's fine. That makes us

ten under...well, just under ten under [unintelligible] we've been

funding lately.

<u>Trader-B</u>: [unintelligible] Yeah, sure.

444. A short time later, Trader-B followed through and contacted Submitter-4 with Trader-C's manipulation request: "mrng beautiful if u can would love a low fixing in 3s libor today...." Submitter-4 then asked: "ok skip - what u need?" to which Trader-B answered: ".77 if poss but just no higher than yest!!" Submitter-4 agreed, stating: "no prob." On that day, both Rabobank and Bank-B submitted 0.77 for the three-month Yen-LIBOR, placing both banks' submissions in a tie for the second lowest submission on the Contributor Panel.

4. Lloyds Admitted it had a Standing Agreement to Collude with Rabobank

445. Between 2006 and 2008, Lloyds colluded with Rabobank to make Yen-LIBOR submissions to Thomson Reuters and the BBA that would advantage both of their trading positions. Lloyds' submitter and Rabobank's submitter, identified as Paul Robson ("Robson"), formed an agreement to submit Yen-LIBOR submissions that benefited their respective trading positions. On at least 16 occasions, Lloyds either requested Rabobank make or received requests

from Rabobank to make a particular Yen-LIBOR submission. The banks regularly accommodated each other's requests.

- 446. For example, on July 27, 2006, Robson informed Lloyds' submitter that "i need a high 1mth today so i will be setting obseenly high 1mth." Lloyds' submitter replied "sure mate no worries . . . give us an idea where and I'll try n oblige. . . ;)." The two agreed to (and did) submit the 1 month Yen-LIBOR submission at 0.17. Later the same day, Lloyds' submitter contacted Robson to ask "what u going 3s libor . . . hoping for a higher one . . . 0.35 or u think that is pushing it a bit." Robson replied "nope fine with me mate . . ."
- 447. On July 6, 2006, Robson requested a "high 1mth set today i will be setting something ridiclous like 28 or 29 for info." Lloyds' submitter correspondingly boosted the bank's Yen-LIBOR submission by two basis points compared to the previous day.
- 448. On July 19, 2007, Lloyds' submitter responded to a Lloyds trader's request to set "a nice little low 3s." The Lloyds' submitter agreed and told the trader "I'll have a word with [Robson] as well, he'll drop it down for you as well I'm sure It needs more than one, mate, trust me." The Lloyds' submitter contacted Robson and said "mrng beautiful if us can would love a low fixing in 3s libor today" Robson responded "ok skip what u need?" The two agreed on 0.77 and both banks made a corresponding Yen-LIBOR submission.
- 449. Robson contacted Lloyds' submitter on March 19, 2008 seeking for his colleague, Takayuki Yagami, "a high 6m libor if u can help skip [Yagami] asked me to set 1.10!" The Lloyds' submitter responded "oops my 6s is 1.15!!!"
 - 5. Deutsche Bank Regularly Colluded With UBS, As Well As Barclays, Citibank, Merrill Lynch, and Société Générale
- 450. From mid-2008 through mid-2010, Trader-11 regularly communicated with former UBS Senior Yen Trader, Tom Hayes, to manipulate Yen-LIBOR and Euroyen TIBOR,

going so far as to align their trading positions so the two would mutually benefit from their manipulative conduct. Trader-11 was also a submitter at Deutsche Bank in 2008 and 2009, so he was able to directly manipulate Deutsche Bank's Yen-LIBOR submissions to accommodate Hayes' requests, along with setting Yen-LIBOR and Euroyen TIBOR to benefit his own trading book. On August 28, 2008, the two discussed their agreement to work together, stating:

<u>Hayes</u>: look i appreciate the business and the calls we should try to share

info where possible also let me know if you need fixes one way or

the other

<u>Trader-11</u>: sure sorry mate have to go too busy on many things . . .

<u>Hayes</u>: and i'll do the same if you have any joy with you setters no prob

<u>Trader-11</u>: good evening

451. Trader-11 continued to electronically communicate with Tom Hayes to coordinate favorable Yen-LIBOR and Euroyen TIBOR submissions. The next month, Trader-11 helped Hayes lower six-month Yen-LIBOR. Hayes explained to Trader-11 that he stood to gain 75 million Yen, approximately \$750,000, per basis point that the rate decreased:

September 18, 2008:

<u>Hayes</u>: you got any ax on 6m fix tonight?

<u>Trader-11</u>: absolutely none but i can help

Hayes: can you set low as a favour for me?

<u>Trader-11</u>: done

Hayes: i'll return favour when i can just ask have 75m m jpy a bp tonight

<u>Trader-11</u>: np

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452. In exchange for Trader-11's help, the next day, Tom Hayes offered to pay Trader-11 more money for a trade, explaining that he was offering to do so "in fact cause you help me on 6m yday."

453. Trader-11 also regularly made Deutsche Bank's Yen-LIBOR submission at Hayes' preferred direction. For example, on January 15, 2009, Trader-11 asked Hayes, "where should i put my libors" and listed various possible submissions for Hayes to choose from, based on what would be most profitable for Hayes' Euroyen-based derivatives positions. This successful coordination to benefit their respective Euroyen-based trading positions continued well after Hayes left UBS and started working at Defendant Citibank in September of 2009.

454. Trader-11 and Hayes planned their coordination months in advance, ensuring that their Euroyen-based derivatives would be profitable when they ultimately reached their IMM fixing dates. In the following example, Hayes started planning in March 2010, roughly ten months prior to his December IMM date, to manipulate three-month Yen-LIBOR higher to benefit his "massive" Euroyen-based derivatives position. Trader-11 obliged, stating:

March 26, 2010:

<u>Hayes</u>: you got much in 3m libor in dec

9

Trader-11: nothing

Hayes: ok i really gonna need 3m lib up a bit in dec have massive imm fix

vs [Bank J]

Trader-11: hum np

<u>Hayes</u>: thanks

Trader-11: we have time by then

<u>Hayes</u>: anything i can help with let me know

455. Deutsche Bank also colluded with several other Defendants besides UBS, including Barclays, Citibank, Merrill Lynch, and Société Générale to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives.⁶⁵

6. The January to May 2007 Campaign to Manipulate Three-Month Yen-LIBOR

- documented requests directed towards manipulating Yen-LIBOR submissions. However, UBS Senior Yen Trader Hayes had particularly large trading positions tied to three month Yen-LIBOR that matured in January and February 2007 and in April and May 2007. As a result UBS Senior Yen Trader Hayes embarked on a coordinated campaign to manipulate three-month Yen-LIBOR for the benefit of his Euroyen-based derivatives positions. For this purpose, UBS Senior Yen Trader Hayes made manipulative requests to UBS's Yen-LIBOR submitters, brokers and other Yen-LIBOR Contributor Banks. UBS Senior Yen Trader Hayes reciprocated the requests to other Yen-LIBOR Contributor Banks by offering to adjust UBS's Yen-LIBOR submissions to suit their Euroyen-based derivatives positions.
- 457. In an electronic chat on February 2, 2007, UBS Senior Yen Trader Hayes explained the aim of the 2007 campaign to an External Trader at another Yen-LIBOR Contributor Bank. Hayes explained that his manipulative efforts to date were already producing results because he was: "...mates with the cash desks, [Panel Bank 3] and i always help each other out" with the result that "3m libor is too high cause I have kept it artificially high." Hayes also explained that he was currently keeping that Yen-LIBOR rate one basis point too high and that in May 2007, he would manipulate three-month Yen-LIBOR one basis point too low.

⁶⁵ NYSDFS at 8.

- 458. In support of his efforts to manipulate three-month Yen-LIBOR, UBS Senior Yen Trader Hayes also sought to manipulate one-month and six-month Yen-LIBOR as well.
- 459. Phase One. Between January 17 and February 5, 2007, in the first phase of his campaign, UBS Senior Yen Trader Hayes made at least 18 three-month manipulative requests to UBS's Yen-LIBOR submitters. He also made at least six Internal Requests for one-month submissions and at least 10 Internal Requests for six-month submissions. The UBS Trader-Submitters agreed to help with every Internal Request.
- 460. For example, on January 24, 2007, UBS Senior Yen Trader Hayes contacted Manager A, who supervised and provided input to the Trader-Submitter making UBS's Yen-LIBOR submissions. UBS Senior Yen Trader Hayes asked Manager A to: "...try to keep 6m and 3m libors up." Manager A responded: "standing order, sir." The same day, Trader-Submitter A, complained to Manager A that UBS Senior Yen Trader Hayes and Trader B wanted conflicting submissions. Trader-Submitter A complained: "As I said to you, I got to say this is majorly frustrating that those guys can give us shit as much as they like...One guy [UBS Senior Yen Trader Hayes] wants us to do one thing and [Trader B] wants us to do another...."
- 461. On February 5, 2007, UBS Senior Yen Trader Hayes contacted Manager A and Trader-Submitter A in an electronic chat: "...last 3m fix if you cld keep high (6m wd prefer high but not urgent) and if we cld keep 1m low wd be appreciated, if doesn't suit let me know and maybe we can offset our fixes thx any help much appreciated." UBS Senior Yen Trader Hayes's offer to "offset our fixes" was an express recognition that his requests may conflict with the trading positions of Manager A. Therefore, in order to safeguard against his requests being rejected, UBS Senior Yen Trader Hayes offered facilitation trades to Manager A to align their interests and "offset" any losses that Manager A may incur by carrying out the request.

- 462. Throughout this period, UBS's submissions were consistently in the top quartile of Contributor Panel Banks for three-month Yen-LIBOR except on one occasion when it fell into the middle of the pack for one day on January 24, 2007.
- 463. As part of the same campaign, on at least four occasions in January 2007, UBS Senior Yen Trader Hayes made External Requests to External Traders at Panel Bank 3 to persuade them to cause their bank's submitters to increase their three-month Yen-LIBOR submissions. In return, UBS Senior Yen Trader Hayes offered to ask UBS's Trader-Submitters to make Yen-LIBOR submissions to suit the positions of the external traders. For example, on January 19, 2007 in an electronic chat, UBS Senior Yen Trader Hayes asked External Trader B at Panel Bank 3 to help him obtain a high three-month Yen-LIBOR submission from Panel Bank 3 because he had: "absolutely massive 3m fixes." UBS Senior Yen Trader Hayes said: "Anytime i can return the favour let me know as the guys here are pretty accommodating [sic] to me."
- 464. UBS Senior Yen Trader Hayes also made at least one Broker Request as part of the first phase of the 2007 campaign.
- 465. Phase Two. Between the end of March and the middle of May 2007, as part of the second phase of the 2007 campaign, UBS Senior Yen Trader Hayes made at least 27 Internal Requests for low three-month Yen-LIBOR submissions. In all but one instance (when the request went unanswered), the Trader-Submitters agreed to the requests. Over this period, UBS Senior Yen Trader Hayes also made at least 23 manipulative Internal Requests for Yen-LIBOR submissions in the six month tenor. In addition, Manager A solicited Internal Requests from UBS Senior Yen Trader Hayes on at least one occasion.
- 466. Examples of UBS Senior Yen Trader Hayes's Internal Requests include on March 29, 2007, when UBS Senior Yen Trader Hayes requested low three and six-month Yen-LIBOR

submissions from Manager A in an electronic chat. UBS Senior Yen Trader Hayes asked what Yen-LIBOR submission UBS was going to set. Manager A replied: "too early to say yet ... prob[ably] .69 would be our unbiased contribution." UBS Senior Yen Trader Hayes repeated the request for a low three-month Yen-LIBOR submission. Manager A responded: "as i said before i dun mind helping on your fixings, but i'm not setting libor 7bp away from the truth i'll get ubs banned if i do that, no interest in that." UBS Senior Yen Trader Hayes replied that he had no interest in that happening either, and that he was "not asking for it to be 7bp from reality" and concluded "anyway, any help appreciated." Consistent with UBS Senior Yen Trader Hayes's requirements, UBS's submission was two basis points less than the "unbiased" figure of 0.69%.

- 467. In recognition that his request might conflict with Manager A's own trading positions, on April 17, 2007 UBS Senior Yen Trader Hayes said in an electronic chat: "... really need low libors today in everything, but esp 6m, let me know if that suits or if not can we do a fra? Thx." UBS Senior Yen Trader Hayes offered the "fra" to Manager A as a facilitation trade in order to eliminate any conflict between their respective positions. In the event, there was no conflict, as reflected in Manager A's positive response: "I've got nothing today, will keep 'em low." On 17 April 2007, UBS's one month submission fell 1.5 basis points to 0.625%. The three month submission remained unchanged from the previous day at 0.65%. UBS's six month submission fell two basis points to 0.68%.
- 468. Over this period, 34 of the 36 three-month Yen-LIBOR submissions made by UBS were lower than the published rate, consistent with UBS Senior Yen Trader Hayes's requests for low submissions.
- 469. In the second phase of the 2007 campaign, UBS Senior Yen Trader Hayes also made at least six External Requests of External Traders at Panel Banks. For example, on April

20, 2007, UBS Senior Yen Trader Hayes followed up on an earlier request in an electronic chat with External Trader C at Panel Bank 4:

Trader A: "mate did you manage to spk to your cash boys?"

External Trader C: "yes u owe me they are going to 65 and 71"

45 minutes later the conversation resumed after the submission had been made by

Panel Bank 4's submitters:

External Trader C: "mater [sic] they set 64!"

Trader A: "thats beyond the call of duty! i wish it was there!"

470. In the second phase of the 2007 campaign, UBS Senior Yen Trader Hayes made at least four Broker Requests in connection with the three-month Yen-LIBOR rate. In addition, UBS Senior Yen Trader Hayes also made at least seven Broker Requests in connection with the one and six-month Yen-LIBOR rate. This included UBS Senior Yen Trader Hayes instructing Broker A of Broker Firm A that he needed to keep cash/interbank lending rates down (the logic being that influencing these rates would indirectly influence the LIBOR submissions of other panel banks).

7. Summer 2009 Manipulative Schemes: The "Turn Campaign" and "Operation 6M"

- 471. Throughout his tenure at UBS, the Senior Yen Trader routinely employed each of his means of manipulation—internal requests, collusion with other panel banks, and coordination with brokers. At times, he used all three means simultaneously for a longer period to achieve his objective. This is illustrated by two long-term efforts from June through August 2009, which were dubbed the "turn campaign" and "operation 6m."
- 472. By June 2009, UBS Senior Yen Trader Hayes had amassed significant positions in Yen interest rate swaps that were impacted by the one, three and six-month maturities of Yen-

LIBOR. The Senior Yen Trader's positions became so large at various points that he was close to exceeding internal risk limits imposed by UBS. The largest positions were tied to six-month Yen-LIBOR. Rather than entering into legitimate hedging positions that would offset his risk, however, the Senior Yen Trader made two coordinated and sustained pushes, to manipulate sixmonth Yen-LIBOR and Euroyen TIBOR in ways that would benefit his massive positions.

473. The Turn Campaign. The Turn Campaign commenced in early June 2009. The Hayes' derivatives positions tied to six-month Yen-LIBOR were due to reset or mature on June 29, 2009 and would benefit from a high six-month Yen-LIBOR. A single basis point move in Yen-LIBOR was worth approximately \$2 million to UBS. Hayes coordinated with the UBS Yen Trader-Submitter 1, the primary four brokers he used, and his friend, Trader-11 at Deutsche Bank, to try to keep six-month Yen-LIBOR high. He explained how they should accomplish his objective. He quantified and emphasized for them the potential impact on UBS's derivatives trading positions. He encouraged the brokers to push submitters at other panel banks for high six-month Yen-LIBOR submissions and to provide "spoof bids" to the market so market participants believed the rates were rising. At times, some of the brokers agreed to enforce the plan by confronting other banks that acted against his interests.

474. The following are examples of Turn Campaign communications:

June 10, 2009: (Emphasis added.)

Senior Yen Trader: "LOW 1m LOW 3m HIGH 6m 6m is important today mate **pls spoof bids**."

<u>Derivatives Broker B1 [R.P. Martin]</u>: "rite ole mate ill make a special effort" June 12, 2009: (Emphasis added.)

Senior Yen Trader:

"i have such big positions on monday i have 1.5m usd

a bp 6m fix will ask [Yen Bank F Trader/Submitter]
for a one day favour we will move up for one day too"

<u>Derivatives Broker A2 [ICAP]:</u> "i know mate, i'm trying to keep on top of it, if it moves out of line for 10 sees you know i'll see it and pull it back."

June 16, 2009: (Emphasis added.)

Derivatives Broker A1 [ICAP]: "Good morning mate, the "turn

campaign" begins today. Will put an e-mail together

at lunchtime to [Cash Broker A]."

Senior Yen Trader: "thx."

June 17, 2009: (Emphasis added.)

Senior Yen Trader: "can you start having chats with your boys about 6m

over the turn? i'd be interested to see what they think

it'll go up by anyway low3, low 1m] high 6m"

Derivatives Broker B1 [R.P. Martin]: "ok mate will do"

Senior Yen Trader: "but to be honest am quite happy with them all

unchanged so don't bust a gut main thing now is to start planting the seed of the turn just casual

chatting you know"

<u>Derivatives Broker B1 [R.P. Martin]</u>: "yep sure thing mate ill start having the

converstaion with some guys here"

<u>Senior Yen Trader</u>: "just ask em what they think it'll move by ... and **say**

other people think maybe 3bp ie talk it up lots"

<u>Derivatives Broker B1 [R.P. Martin]</u>: "yes ole mate understood ill do what i can

to help"

Senior Yen Trader: "u da man"

Derivatives Broker B1 [R.P. Martin]: "aim to please mate"

June 24, 2009: (Emphasis added.)

Senior Yen Trader: "6m is huge for me on monday ..."

Derivatives Broker Al [ICAP]: "i have been putting arbi pressure on [Cash

Broker A] and [Brokerage A Yen Manager] ... would help your cause to also speak to [Brokerage A Yen Manager] on friday regarding the turn squeeze and

its importance ... i will remind you."

Senior Yen Trader: "...thanks i will get [Derivatives Broker B 1] on the

case too remind me to get in touch with [Yen Bank

F Trader-Submitter]."

Derivatives Broker A1 [ICAP]: "yeah need to pull out the big guns for this

one, don't let [Yen Bank F Trader-Submitter] forget

either. :-)es"

June 25, 2009:

Senior Yen Trader: "can you put 6m up on monday when we go through the

turn just for a week or so? ... you did say you'd try to

help me out!"

Yen Bank F

<u>Trader-Submitter:</u> "yes have eno fixing untill 06/07 so i can"

Senior Yen Trader: "thanks mate"

June 26, 2009: (Emphasis added.)

Senior Yen Trader: "pls tell your cash boys i need a high 6m is v v

important"

Derivatives Broker C2: "what lvl shall I suggest? .. yesterday's drop was a bit

of a shocker (in 6m libor) any idea why that

happened? ..."

Senior Yen Trader: "2 people moved it 11bp between them"

Derivatives Broker C2: "the cheek who was it?"

Senior Yen Trader: "[Yen Bank M] and [Yen Bank N]. if you can have a

word"

Derivatives Broker C2: "will do mate"

Senior Yen Trader: "i need you to move 6m up for 2 weeks mate ... but

please move 6m up on monday."

Yen Bank F

Trader/Submitter: "understood"

Senior Yen Trader: "thx i need you in the panel on Monday"

Yen Bank F

<u>Trader/Submitter:</u> "ok enough"

475. On the day of the fixing, June 29, 2009, Hayes made one final push to manipulate higher the six-month Yen-LIBOR fixing. He confirmed his expectations of a high submission with the UBS Yen Trader-Submitter 1 and Deutsche Bank's Trader-11. He also ensured that Derivatives Broker A1 would contact each panel bank. They discussed the expected submission by each bank and what strategy Brokerage A would employ to try to get each submission higher to meet Hayes' goal, such as a "few spoof bids" or direct urging of the various submitters. The following are excerpts from the numerous conversations Hayes had that day with Deutsche Bank's Trader-11, UBS Yen Trader-Submitter 1 and the brokers:

June 29, 2009:

Internal Request: (Emphasis added.)

<u>Senior Yen Trader</u>: "hi 6m cash crosses the year end today we have huge fixings"

Yen Trader-Submitter 1: "indeed"

<u>Senior Yen Trader:</u> "can we set 6m libor high pls? ..."

Yen Trader Submitter 1: "... we dont have any fix at mom"

<u>Senior Yen: Trader:</u> "can we go 74 or 75? we have 2m usda bp fix for the next week i think a lot of people are going to move it up today well i hope"

Yen Trader-Submitter 1: "yes sure will. i go with 0. 75 for you."

External Request to Yen Bank F: (Emphasis added.)

Senior Yen Trader: "pls remember 6m today ..."

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "yah no worries ... 6m libor today good contrib?"

Senior Yen Trader: "high pls as high as you can manage we are going 75 anyway whatever you can do thx."

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "sure np ..."

Request to Broker: (Emphasis added.)

<u>Senior Yen Trader:</u> "ok lets go thru em one by one."

Derivatives Broker B1 [R.P. Martin]: "sure"

<u>Senior Yen Trader:</u> "first up try to get all libors up i don't care if 1m and 3m go up too lets go for 3bp on 6m also tibors were up pls use that with the japanese banks"

Derivatives Broker B1 [R.P. Martin]: "ok"

Senior Yen Trader: "... make sure [the banks) all know its the turn ..."

<u>Derivatives Broker B1 [R.P. Martin]:</u> "yeah thats needed bevcasuse sometimes poepel forget and set them the same ..."

Senior Yen Trader: "... do your best and i'll sort u out."

<u>Derivatives Broker B1 [R.P. Martin]:</u> "[Yen Bank K] rite i know him he speak to my dolla desk thats where r orders come from ill have a word with him amnd ask to get it up ok mate"

Senior Yen Trader: "v v v important. pls try extra extra hard mate"

Derivatives Broker B1 [R.P. Martin]: "i will mate i know yu need it."

Senior Yen Trader: "ok mate i going in 3m pls pls pls try we are going 75 so is [Yen Bank F)"

Derivatives Broker B1 [R.P. Martin]: "ok cheers."

Senior Yen Trader: "get em up mate"

<u>Derivatives Broker B1 [R.P. Martin]:</u> "ill trying really hard"

476. Although the Yen-LIBOR fixing dropped slowly over the month of June 2009, the fixing rose by three quarters of a basis point on June 29, as compared to the previous fixing on June 26. UBS increased its submission on June 29 by three (3) basis points, and Deutsche Bank increased its submission by six (6) basis points. Five other banks in the panel, all of which were discussed by Hayes and Derivatives Broker B1 in their planning call on June 29, also increased their submissions two (2) to five (5) basis points.

477. Operation 6M. During the Turn Campaign, Hayes began his second effort to push six month Yen-LIBOR high after June 2009, in an effort he dubbed, "Operation 6m." Operation 6m was Hayes' campaign to manipulate the six-month Yen-LIBOR fixing upward over several weeks through July, and then to cause the six-month Yen-LIBOR fixing to drop dramatically in mid-August. Hayes also remained focused on the Euroyen TIBOR fixing, which would impact his Euroyen-based derivatives positions.

478. The motivation for this effort was clear. If Hayes was successful in causing an increase to the six-month Yen-LIBOR between the end of July and then a drop in the fixing in mid-August, the UBS Yen Desk stood to gain hundreds of millions of dollars.

479. As with the Turn Campaign, Hayes' key contacts at certain brokerages and his friend, Trader-11, were critical to his plan. Hayes emphasized that he was trying to benefit his Euroyen-based derivatives positions while simultaneously managing the massive amount of risk created by his position, something UBS was very concerned about.

480. The following are examples of the communications surrounding the beginning of Operation 6m in late June and July.

<u>June 24, 2009</u>: (Emphasis added.)

<u>Derivatives Broker A1 [ICAP]:</u> "Morning ... ,[Yen Bank B] must have had some fixings, not helping"

Senior Yen Trader: "he on drugs for once i just want them static and they are falling! ... pls try to keep ly low on screen mate yeah i just need thgis 6m gap for 2weeks"

<u>Derivatives Broker A1 [ICAP]:</u> "will do my best mate"

<u>Senior Yen Trader</u>: "then they can all go down hopefully tibor will stay high *operation 6m.*"

Derivatives Broker A1 [ICAP]: ";-) ..."

June 26, 2009:

<u>Senior Yen Trader:</u> "... but for the next 2weeks i really really need you to put 6m higfher"

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "what is the adte just that i know?"

Senior Yen Trader: "july 14 ... after that i need 6m to crash off like you."

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "that is no problem for me, i do nothing with the cash guys until then. . .."

Senior Yen Trader: "... i will then get our 6m way down after july 18th it is

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "ok"

Senior Yen Trader: "and will try to get everyone else down too"

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "when is the lest fixing date? ... the last july fixing date?"

<u>Senior Yen Trader:</u> "18th ... then i a need low low low ... sry 17th ... i happy for all libors off after that date ... only reason ion bid is i have huge position that way so am happy for to come lower after the 17th"

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "ok enough enopugh ..."

July 1, 2009:

<u>Senior Yen Trader:</u> "hi are we planning on moving libors or just going unch?"

Yen Trader- Submitter 1: "i would have gone slightly lower in 6s but if you wish i can leave it unchanged"

Senior Yen Trader: "thx really need it unch for next 2wk then low as you want"

Yen Trader- Submitter 1: "ok 0.71 unc"

Senior Yen Trader: "ta."

July 7, 2009: (Emphasis added.)

Senior Yen Trader: "mate u gotta help with [Yen Bank J]"

Derivatives Broker B1 [R.P. Martin]: "ill do my best to ask amte ok"

Senior Yen Trader: "pls if he only goes up 2bp that brings em back 0.25 no one will notice"

<u>Derivatives Broker B1 [R.P. Martin]</u>: "sure ok mate ill try **ill run him thru a bit higher this** mng aswell to try and show it small higher"

Senior Yen Trader: "just bid him some as well then he can tell his bosses look its bid here thats all he needs to do say well its bid here and we can't offer it"

<u>Derivatives Broker B1 [R.P. Martin]</u>: "ok sure mate i can only ask not tell him as yu know ok"

Senior Yen Trader: "y but he loves you mate he told me."

<u>Derivatives Broker B1 [R.P. Martin]</u>: "hahahah rite ill try and be his friend nomn juts his broker"

July 14, 2009:

Senior Yen Trader to [Guillaume Adolph] Deutsche Bank Trader-Submitter:

"... just fyg after eom [end of month] will get 6m down a lot. we will move from top to bottom and so will [Yen Panel Bank J]"

<u>July 15, 2009</u>: (Emphasis added.)

<u>Derivatives Broker C/D 1:</u> "... ha ha ok mate **i can see you as captain chaos** cash still looking a touch easier but nothing much going on arbi are starting to produce bids so hopefully the offers may go back"

<u>Senior Yen Trader:</u> "ok i only need 6m high this month then you MUST get it lower a lot lower pls keep 3m and 1m unch."

Derivatives Broker C/D1: "ok ..."

481. Avoiding Conflict with Guillaume Adolph's Interests. During Operation 6m (and at other times), Hayes offered to enter into trades with Deutsche Bank's Trader-11 (Guillaume Adolph) to ensure that their respective interests aligned and Trader-11 would not have a conflict that prevented him from helping Hayes with manipulating Yen-LIBOR. Hayes offered similar offsetting trades to UBS Trader-Submitters when their positions stood to be negatively impacted by a manipulation that favored Hayes. Hayes urged Trader-11: "tell me what you need to see. i have a vested interest in making sure our fixings match." As he was so

concerned that Deutsche Bank not make a competing submission, Hayes offered such trades even at prices that were not beneficial to him to entice Trader-11, and the latter often accepted. For example on July 21, 2009, Hayes outlined his plan, the size of his positions, the need to reduce his risk and how Trader-11 could benefit from an attractive trade:

Senior Yen Trader: "i been asked to reduce risk a bit"

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "ok"

<u>Senior Yen Trader:</u> "i still going for lower 6m next month but position is huge if you want to do some 1y 1/t 1 wid help me on risk limits obviously i am still very much paid and need a low 6m from next week"

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "me paying 1 in 1 y?"

Senior Yen Trader: "y i don't want to do it but risk are going nuts position is v v big i told them already 6m will be lower next month problem is all my 6m fixes this month rolled and i am left too 1 way completely up to you if not i'll give some 3m 1/t."

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "... does not suit me taht much today need high 6m libor today"

Senior Yen Trader: "same how about we do Ov6 spot as well? so no fix today i just need to keep the risk guys at bay 200b ly will bring me in limit i will pay you .665 for Ov6 today in same amount to knock the fix out if you need I think it does nothing today the fix that is wid be a massive favour ... if you do 200b 1y then what net fix are you left with? i will hedge the balance so you are neutral"

[Guillaume Adolph] Deutsche Bank Trader-Submitter: "can i do 200 and lower my 6m quote? oor we cross fra up to you mate"

Senior Yen Trader: "rahter just cross the fra pls"

[Guillaume Adolph] D Trader-Submitter: "that is fair ok we done"

Senior Yen Trader: "thanks" (Emphasis added)

482. In the following communication between Hayes and Trader-11, the two agree that for the following two weeks, they will raise six-month Yen-LIBOR to the mutual benefit of their Euroyen-based derivatives positions:

June 26, 2009:

Trader-11: is there a date u see we could have 6m libor ot is no point being

stubborn in that direction an i do sthing else sorry 6m lower

hopeviuosly no for teh next 3 weeks

Hayes: basically i will help you in 2 weeks time 1 am the saem way

<u>Trader-11</u>: perfect

<u>Hayes</u>: but for the next 2weeks i really really need you to put 6m

higfher

Hayes: after that i need 6m to crash off like you

Trader-11: that is no problem for me, i do nothing with the cash guys until

then

<u>Hayes</u>: i need you to move 6m up for 2 weeks mate

<u>Hayes</u>: but please move 6m up on Monday

Trader-11: understood

<u>Hayes</u>: thx i need you in the panel on Monday

<u>Trader-11</u>: ok enough cheers

<u>Hayes</u>: i will then get our 6m way down after july 18th it is ... and will try

to get everyone else down too

<u>Trader-11</u>: ok enough enough on my fra switch it is your best?

tell me what you need to see i have a vested interest in making Hayes:

sure our fixings match just don't rip me off too much i had those

round mid i got to go soon

ok -1.5 and -1 ami asking too much? Trader-11:

thats fine Hayes:

483. The Last Phase of Operation 6M. As Operation 6m moved from the end of July 2009, the Senior Yen Trader shifted his efforts from increasing the six-month Yen-LIBOR higher, to ensuring that the fixing would be lower in August 2009 to benefit UBS's Euroyenbased derivative positions that were due to reset in mid-August. Derivatives Broker Al advised the Senior Yen Trader to be careful with his efforts and to avoid changes in the rate that were too obvious. The Senior Yen Trader assured him not to worry, and that he was coordinated with Yen

484. In July 2009, the Yen-LIBOR submissions of UBS and Deutsche Bank both moved higher consistent with the plan. When Hayes and Trader-11 were not in the office, they communicated with their BlackBerry mobile phones to coordinate Operation 6m. In the following electronic chat, Hayes and Trader-11 ensured that Operation 6m would continue when Hayes was out of UBS's Tokyo office for the month of August:

July 23, 2009:

Panel Banks J and Deutsche Bank.

Hayes: ok we need to coordinate the 6m drop when do you need it falling?

Trader-11: whenever

Hayes: ok we need aug 11th you are back by then? if you need earlier let me

know i am going to be away the whole of august almost if you need

anything i am in london and zurich offices oon blackberry

@ubs.com will be pushinh lower 6m from aug 11th

back on the 10th in ldn Trader-11:

Hayes: ok well lets sort 6m out from 11th will make a massive push

- 485. Trader-11 followed through on his promise to Hayes, lowering Deutsche Bank's six-month Yen-LIBOR submissions drastically. He also informed other co-conspirators, telling Trader K-2 from Firm K that "between u and me 6m libor is going to go very low in sep" and "[Hayes] will drop and teh others when back from holiday."
- 486. In August 2009, the submissions of all three banks, UBS, Deutsche Bank and Yen Bank J, all moved lower consistent with the plan. By August 11, 2009, the day of the Senior Yen Trader's desired drop in the fixing, the submissions of all three banks dropped, such that Yen Panel Bank J and Deutsche Bank were in the bottom quartile of the submitting banks while UBS ·was included in the fix calculation. Specifically, from late July 2009 through mid-August 2009, UBS's submission fell 12 basis points, Yen Panel Bank J's and Deutsche Bank's submissions fell by 14 and 15 basis points, respectively. In contrast, the largest change in any other submitting bank's submission during this time was a drop of eight basis points and the average change among the other thirteen banks was a decrease of about four basis points.
 - J. The Contributor Bank and Broker Defendants Knew That Other Contributor Bank Defendants Were Manipulating Yen-LIBOR, Euroyen TIBOR and the Prices of Euroyen-Based Derivatives.
- 487. For example, as early as February 2, 2007, RBS Trader-3 knew that former UBS and Citigroup Trader Thomas Hayes communicated with another Contributor Panel bank, unidentified Bank-A, as part of Hayes's efforts to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives. As a result of UBS's collusion with unidentified Bank-A, RBS also knew that UBS had kept three-month Yen-LIBOR "artificially high." This provided RBS "useful" insight into the artificial direction of the manipulation and thus a key informational advantage, *i.e.*, knowing the "artificial[]" trend in the three-month Yen-LIBOR, over other Euroyen market participants. For example, in an electronic chat on February 2, Hayes stated:

<u>Hayes</u>: ...3m libor is too high cause i have kept it artificially high.

Trader-3: how

<u>Hayes</u>: being mates with the cash desks, [Bank-A] and i always

help each other out . . . too.

Trader-3: ok thats useful to know. . .

488. RBS Yen traders also knew that they were engaging in wrongful conduct and that Yen-LIBOR was being manipulated to benefit Euroyen-based derivative positions throughout the market. As the Senior Yen Trader, Yen Manager, and other Yen traders coordinated their requests for beneficial Yen-LIBOR submissions with the Primary Submitter, they discussed at times how the Yen-LIBOR panel was a "cartel" in which rates were being "manipulated." RBS traders, including the Senior Yen Trader, also discussed how the UBS Yen Trader was manipulating Yen-LIBOR, including by coordinating with others. Examples of such communications include the following:

August 20, 2007:

Yen Manager: it seems to be [UBS] is pushing for these [Yen]

libors partnering up with number of cash guys

as well [...]

Yen Trader 2: veah [UBS Yen Trader] all over it

August 20, 2007: (Emphasis added.)

<u>Senior Yen Trader</u>: this libor setting is getting nutss [...]

Bank A Trader: im puzzled as to why 3m libor fixing not

coming off after the FED action [...]

<u>Bank B Trader</u>: [UBS] is lending dolls through my currencies in

3 month do usee him doing the same in urs [...]

Senior Yen Trader: yes[,] he always led usd in my mkt[,] **the Yen-**

LIBOR is a cartel now [...]

Senior Yen Trader: its just amazing how libor fixing can make

you that much money [...]

<u>Senior Yen Trader</u>: [...] its a cartel now in london[.] they smack all

the 1yr irs .. and fix it very high or low [.] they smack all the 1yr irs .. and fix it very high or

low

December 5, 2007: (Emphasis added.)

Yen Trader 2: FYI [Yen] libors higher again today [...]

Yen Trader 4: 'ucksake. keep ours low if poss. don't

understand why needs to go up in yen

Yen Trader 2: no reason dude[,] [Bank C] and [Bank D]

went high yest

Yen Trader 4: send the boys round [...]

Yen Manager: pure manipulation going on

489. Former Rabobank traders and submitters also recognized that Yen-LIBOR was "definite[ly] manipulate[ed]" throughout the market. For example, on July 7, 2009, Rabobank Trader-5 shared his impressions with Submitter-4 that "some ppl are talking with each other" to artificially lower the three-month Yen-LIBOR. Not surprised by Trader-5's impressions, Submitter-4 commented that Yen-LIBOR was manipulated, and in fact "always" is manipulated. Submitter-4 continued to explain that he too "always used to ask if anyone needed a favour and vise versa," recognizing that although this was "unethical" it "always helpd to have fireind [friend] in [the] mrkt."

K. As Sophisticated Market Participants, the Contributor Bank and Broker

Defendants Knew Their Manipulation of Yen-LIBOR, Euroyen TIBOR and the

Prices of Euroyen-Based Derivatives Would Have (And Did Have) Adverse

Financial Consequences on Other Euroyen-Based Derivatives Market

Participants

490. Defendants were far from naive in Euroyen-based derivatives trading and were well aware of the basic features of Euroyen-based derivatives, including Euroyen TIBOR futures

contracts. Accordingly, Defendants understood that to the extent they increased their profits or decreased their losses in certain transactions from their manipulation of Euroyen rates, other market participants would suffer corresponding adverse financial consequences.

- 491. For example, from as early as May 2006 and continuing at least through October 2008, Rabobank Submitter-4 and Lloyds trader ("Trader-B") had an agreement that they would, upon request, contribute Yen-LIBOR submissions to benefit each other's Euroyen-based derivative positions, or the Euroyen-based derivative positions of other traders. As Trader-B explained in an email forwarding a Yen-LIBOR submission request from Submitter-4 to the Yen-LIBOR submitters at Lloyds: "We usually try and help each other out...but only if it suits."
- 492. This relationship continued on July 27, 2006, when Rabobank Submitter-4 contacted Trader-B on behalf of Rabobank Trader-5 to request a high one-month submission consistent with Rabobank's submission: "[Trader-5] wants a high lm fix from me today....am going to set .37." Trader-B agreed: "that suits mate," "so happy to ablige." Lloyds' submission jumped from 0.35 to 0.37 between July 26, 2006, and July 27, 2006, a move that took Lloyds' submission from being tied as the lowest submission on the Yen-LIBOR Contributor Panel to being tied as the second highest submission on the Yen-LIBOR Contributor Panel.
- 493. The following day, July 28, 2006, Rabobank Submitter-4 and Trader-5 conferred internally regarding their mutual desires for another high one-month Yen-LIBOR fixing.

 Submitter-4 stated to Trader-5: "setting a high lm again today I need it!" to which Trader-5 responded: "yes pls mate...I need a higher lm libor too." Within approximately 20 minutes,

 Submitter-4 contacted Trader-B and stated: "morning skipper will be setting an obscenely high lm again today...poss 38 just fyi." Trader-B responded, "(K)...oh dear..my poor customers....hehehe!! manual input libors again today then!!!!" Both banks' submissions on July

28, 2006, moved up one basis point, from 0.37 to 0.38, a move which again placed their submissions as the second highest submissions on the Contributor Panel that day.

494. On July 27, 2006, Lloyds was one of only two Yen-LIBOR Contributor Banks to move their one-month Yen-LIBOR submission up from .35 (July 26) to .37 (July 27). In addition, aside from Rabobank, Lloyds was the only other Yen-LIBOR Contributor Bank to move its one-month Yen-LIBOR submission up an additional basis point from .37 (July 27) to .38 (July 28). Lloyds brazenly recognized that its "manual input libors" were not only false, but exclaimed that even this one basis point move would harm Euroyen-based derivatives market participants, including Lloyd's "poor customers."

495. Similarly, at Deutsche Bank, despite knowing what they were doing was illegal, its employees continued to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. In a 2008 phone call, Trader-11 told an unknown caller ("UC") that Hayes and UBS were manipulating Yen-LIBOR lower, along with the help of at least eight other banks. Because Hayes was coming up on a large reset date for his Euroyen-based derivatives positions, he told Trader-11 that each decrease in a basis point would be worth approximately 75 million Yen (roughly \$750,000) for his trading book. Upon telling the UC this information, Trader-11 confirmed that these actions were illegal, stating:

<u>Trader-11</u>: Um...it was not...not that big movement in the cash and [UBS] is manipulating it at the moment to get it very low.

UC: You are telling me that the [UBS] is manipulating right?

<u>Trader-11</u>: Yeah. I mean yesterday [Hayes] came to me, ok, and said "hello mate," "hello," "I've got a big reset, that was yesterday, and about 750, uh...75 million yen dv01, ⁶⁶ can you put it low?"

⁶⁶ This refers to Hayes' "delta," or the impact on Hayes' portfolio resulting from a one basis point change in Yen-LIBOR.

<u>Trader-11</u>: And [Hayes] said, 'can you put it low?' I said, 'yeah, ok.' At the

end...at the end of the day, [laughter] it went down [unintelligible]

bps when I think cash is better bid.

<u>UC</u>: Fucking hell.

<u>Trader-11</u>: And he's doing that with the 16 banks [laughter].

<u>UC</u>: That means [UBS] is asking 16 banks to...to...to ask you guys to

put it high.

Trader-11: Maybe not...not 16 banks, but you know, if he knows eight banks,

that's enough.

Trader-11: Yeah this is why the LIBOR came off yesterday. For no other

reason.

<u>Trader-11</u>: Yeah, yeah, I know, but...because it was manipulated by Hayes

<u>UC</u>: Fucking hell, manipulating, Wow!

<u>UC</u>: Is that...is that legal or illegal?

<u>Trader-11</u>: No, that's illegal. No, that's illegal....

496. Again, in a September 30, 2008 electronic chat, Trader-11 acknowledged that manipulating Yen-LIBOR and Euroyen TIBOR was wrong. Trader-11 told Submitter-8, another Deutsche Bank employee, that ten days prior Hayes "call[ed] [Trader-11] directly to beg [Trader-11] to put a low 6m libor." Submitter-8 replied, "you're kidding me??????" and stated "that's not very kosher" Trader-11 replied, "no, not really." Despite knowing that manipulating Yen-LIBOR and Euroyen TIBOR was illegal, Trader-11 continued to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives products through at least 2010.

L. <u>Defendants Concocted False Stories They Could Give In The Event Someone</u> <u>Questioned Their Manipulation of Yen-LIBOR, Euroyen TIBOR, and the Prices</u> of Euroyen-Based Derivatives

497. The Senior Yen Trader and other RBS Yen traders knew that they could impact the fixing of the daily Yen-LIBOR and were aware that RBS's Yen-LIBOR submissions could be questioned by the BBA. In the following example, the Senior Yen Trader boasts about how RBS succeeded in moving six-month Yen-LIBOR and then discussed what false story they could tell to the BBA to justify the low submission if necessary:

April 2, 2008: (Emphasis added.)

Senior Yen Trader: - nice [Yen] libor[.] our 6m fixing move the

entire fixing[.] hahahah

Yen Trader 1: the BBA called to ask me about that today

Senior Yen Trader: really?

Yen Trader 1: yes –

Senior Yen Trader: they complain?

Yen Trader 1: asked to speak to me about the low 6m rate

Yen Trader 1: no[,] just to make sure i was happy with it

[...]

Senior Yen Trader: i think some banks must have complain

Yen Trader 1: he called b4 any of the other banks saw our

data[,] at about 11.15[,] to check it was ok

Senior Yen Trader: oh then its fine

Yen Trader 1: **before publishing**

Senior Yen Trader: i am sure some HF [hedge fund] will complain

tomorrow .. tough

Yen Trader 1: tough

<u>Senior Yen Trader:</u> we will say we lower every tenor .. 1m 3m 6m

.. we feel rbs name has very good credit .. no

problem getting money in

Senior Yen Trader: good way to boost share price!

Senior Yen Trader: our 3m libor is at top end ... 6m at bottom end ...

just the ideal level!

498. To conceal its wrongdoing, Deutsche Bank repeatedly lied to the FCA during its probe into Deutsche Bank's LIBOR-related misconduct. The FCA's Final Notice against Deutsche Bank details how the bank attempted to hide the Federal Financial Supervisory Authority for Germany's ("BaFin") findings from their LIBOR probe. In 2012, BaFin reviewed Deutsche Bank's LIBOR misconduct, producing a report ("The Report") to the bank in August of 2013.⁶⁷ Deutsche Bank was unhappy with The Report, which heavily criticized the bank.⁶⁸

499. In the course of its investigation, the FCA requested the Deutsche Bank provide it a copy of The Report.⁶⁹ Deutsche Bank's Senior Management, concerned about disclosing both The Report and BaFin's findings, sought the advice of counsel.⁷⁰ Deutsche Bank's lawyers informed them that a failure to disclose The Report would constitute a breach of FCA Principle 11, which broadly covers providing false, misleading or inaccurate information to the FCA, including during an investigation.⁷¹

500. Disregarding this advice, Deutsche Bank went on a campaign to suppress The Report. In September 2013, Deutsche Bank's Senior Manager F met with BaFin and expressed concern regarding disclosure of The Report. The BaFin took no position, meaning Deutsche Bank was free to provide the report to FCA.

⁶⁷ Ex. I-3 at 26.

⁶⁸ *Id* at 27.

⁶⁹ *Id*.

⁷⁰ *Id.* at 26.

⁷¹ *Id*. at 27.

- 501. After the BaFin meeting, on September 6, 2013, Senior Manager F talked to Senior Manager G via telephone. Together, Senior Managers F and G scripted a fabricated response, which they agreed to follow if the FCA asked Deutsche Bank to produce The Report in the future. The script read as follows:
 - ... the BaFin has explicitly stated to DB that it would not approve of DB sharing either copies or details of the contents of the aforementioned documents [including the report] with foreign regulators at this stage. 72
- 502. To provide further cover for Deutsche Bank's actions and support the scripted response above, Senior Manager F met with Legal Manager A later that same day to draft an "attendance note" about the BaFin meeting. The note was intentionally ambiguous and written so that it could be interpreted to state that the BaFin expressly prohibited Deutsche Bank from disclosing The Report to the FCA. Conveniently, this ambiguous document was the only record of the September BaFin meeting.
- 503. All the while, Deutsche Bank's management knew that disclosing The Report was not prohibited by BaFin. For example, in a September 10 email, a Deutsche Bank Legal Team member wrote that "subject to the [Management] Board agreeing, we would likely inform the other regulators about receipt of the [Report and the other materials] but only be prepared to share the [Report]."⁷³ This statement was also reflected in papers sent to the management board during a meeting which stated that disclosure of The Report "may be acceptable for the BaFin."
- 504. Despite being told by its legal department to disclose The Report to the FCA,

 Deutsche Bank's management deliberately chose to conceal BaFin's criticisms against the bank.

 On September 13, 2013, Deutsche Bank conveyed the previously-scripted statement to the

⁷² *Id.* (alteration in original).

⁷³ *Id.* at 28 (alterations in original).

FCA's Enforcement and Financial Crime Division. On September 16, Senior Manager E told the FCA's Supervision Department the same message during a phone call. Deutsche Bank also followed-up via email on September 16, stating to the FCA:

DB received several documents from the BaFin in August 2013 including [the Report]... The BaFin has indicated to DB that it would not approve of DB sharing either copies or details of the contents of the documents referred to above with foreign regulators at this stage. In these circumstances, the Bank feels that it has no option but to defer to the BaFin's wishes. As discussed, if you would like further information, we would therefore ask that you speak directly with your contacts at the BaFin.⁷⁴

505. Collectively, the information Deutsche Bank told the FCA was inaccurate, misleading, and intentionally crafted to keep the FCA from discovering the criticisms of the bank, including The Report, that senior management considered unflattering.

506. On January 30, 2014, the FCA began to investigate Deutsche Bank for its failure to disclose The Report. Deutsche Bank continued to make misrepresentations to the FCA to cover-up its LIBOR-related misconduct. Deutsche Bank Senior Manager H represented to the FCA that the attendance note of the September meeting with BaFin substantiated the bank's position that their non-disclosure was reliable and appropriate. Senior Manager H later determined that the attendance note was misleading, but did not contact the FCA to correct his misleading statement. The FCA determined that the attendance note was drafted by Legal Manager A two days after the September meeting, at which he was not present.⁷⁵

507. To further conceal its LIBOR-related misconduct, members of Deutsche Bank's compliance department repeatedly refused to conduct internal audits of its LIBOR submission process. For example, on October 25, 2010, a Deutsche Bank Compliance Supervisor asked

⁷⁴ *Id.* (emphasis added).

⁷⁵ *Id.* at 29.

Compliance Officer A to look into the bank's LIBOR-related systems and control to formally review the banks' practices in multiple currencies. ⁷⁶ Upon information and belief, "Compliance Officer A" is Andrew Sowter, Deutsche Bank's Head of Compliance Asia Pacific and the Global Head of Global Banking Compliance. ⁷⁷ Compliance Officer A ignored this request and did not conduct the review because it would negatively impact Deutsche Bank's highly profitable LIBOR-based derivatives business, explaining to another Deutsche Bank employee that he thought the Compliance Supervisor's idea of reviewing the LIBOR submission process was "crazy" and that "the business is going to go completely mental" if any kind of audit ever takes place. ⁷⁸

508. Later that same year, Compliance Officer A struck again, this time in response to a December 2010 request from the BBA that Deutsche Bank conduct an internal audit of its LIBOR submission process. Rather than simply conduct the review, Compliance Officer A signed and submitted a confirmation to the BBA on January 12, 2011, stating that Deutsche Bank's LIBOR submissions had already been audited. This was a lie—Deutsche Bank's compliance did not audit the systems and controls in place for LIBOR. Compliance Officer A further dismissed the BBA's request and his fraudulent statement in an email, stating that the signed confirmation form was nothing more than "an arse-covering exercise [by the BBA]."

509. Following the BBA's request, on February 4, 2011, the FCA requested that Deutsche Bank attest to the systems and controls in place to ensure the integrity of Deutsche

⁷⁶ Ex. I-3 at 23.

⁷⁷ Plaintiff believes this to be true from comparing the DB FCA Final Notice at 30 and the German Regulator at 14. According to DB FCA Final Notice, "Compliance Officer A" prepared an attestation for the FCA pertaining to Deutsche Bank's systems and controls in place for its LIBOR submissions process after a request from the FCA on February 4, 2011. Similarly, Ex. I-6 states that on February 4, 2011, the FCA requested a confirmation of Deutsche Bank's LIBOR systems and controls, to which Mr. Andrew Sowter issued an incorrect written confirmation.

⁷⁸ Ex. I-3 at 23.

Bank's LIBOR submission process. Once again, the task of completing this review fell on Compliance Officer A, who conducted only a minimal investigation into Deutsche Bank's LIBOR submission process. Compliance Officer A found that there were **no LIBOR-specific systems and controls** in place to ensure the integrity of the benchmark. He also found that Deutsche Bank's communication monitoring system would not detect any LIBOR-related "buzz words" indicative of manipulative conduct and/or inter-bank coordination.⁷⁹

510. Despite these findings, on March 18, 2011, Compliance Officer A provided an attestation to Senior Manager I, who signed and returned the following statement to the FCA:

DB monitors all email and instant messaging communications of all front office staff. The focus of this surveillance is DB's market conduct, such that key words and phrases within the monitoring tool are designed to flag potential market conduct issues. Any potential issues can be escalated and investigated as necessary. In light of the above, I consider, together with the senior management [names of Senior Manager B and Senior Manager C provided] . . . that DB currently has adequate systems and controls in place for the determination and submission of DB's LIBOR fixings. 80

- 511. This statement was blatantly false in three respects, as Compliance Officer A knew that Deutsche Bank: (1) did not have any specific procedure in place governing LIBOR submissions; (2) did not conduct spot checks; and (3) did not monitor communications for LIBOR-specific terms. The FCA found that Deutsche Bank's senior management failed to oversee Compliance Officer A or verify any information contained within the attestation.⁸¹
- 512. In yet another failure to comply with a government regulator's request, Deutsche Bank destroyed possibly-relevant evidence after receiving a formal request from the FCA to preserve it. In May 2011, the FCA ordered that Deutsche Bank retain all LIBOR-related data

⁷⁹ *Id.* at 30.

⁸⁰ *Id.* at 30-31.

⁸¹ *Id.* at 31.

and information, including telephone recordings, dated back through 2006. Hermann-Josef Lamberti, a member of Deutsche Bank's management board and Chief Operating Officer responsible for overseeing IT, did not properly warn his subordinates of the FCA order. As a result, in July 2012, Deutsche Bank destroyed audio recording of telephone calls relevant to the LIBOR investigation dating from 2008 to 2009.

- M. <u>Defendants Used Code Words to Conceal Their Manipulation of Yen-LIBOR</u>, <u>Euroyen TIBOR</u>, and the Prices of Euroyen-Based Derivatives
 - 1. ICAP Yen Brokers Used Code Words and Personal Cell Phones To Try and Conceal Their Yen-LIBOR Services
- 513. In late 2007 and early 2008, ICAP's Yen Desk Head, Derivatives Broker 1 and Cash Broker 1 became concerned that ICAP compliance might discover that they were aiding Hayes's manipulation of Yen-LIBOR and the prices of Euroyen-based derivatives. To conceal their unlawful activities, ICAP Derivatives Broker 1 began communicating by personal mobile telephones and text messages with Cash Broker 1. ICAP Derivatives Broker 1 also alerted Hayes about the need to be careful in their communications when explaining their "views:

November 1, 2007:

Derivatives Broker 1:

HI MATE, JUST HAD [Yen Desk Head]
BACK ON RE-LIBORS, HAD A LOT OF
COMPLIANCE PRESSURE RECENTLY
DUE TO CREDIT PROBLEMS, WE BOTH
NEED TO BE A LITTLE MORE SUBTLE
IN OUR "VIEWS"...IE' I THINK THE
FWDS ARE SUGGESTING THIS 6MOS
LIBOR SHOULD BE LOWER...ETC. MY
E-MAILS ETC. NEED TO BE WORDED
MORE CAREFULLY

514. In an effort to ensure that former UBS Senior Yen Trader Hayes's requests escaped detection from review by ICAP's compliance staff, ICAP Derivatives Broker 1 and former UBS Senior Yen Trader Hayes started using code words to mask their discussions about

manipulating LIBOR. ICAP Derivatives Broker 1 and former UBS Senior Yen Trader Hayes used the words "political correctness," "arbitrage," "arb" or "arbi" to denote requests and efforts to push Yen-LIBOR in a particular direction on the UBS Senior Yen Trader Hayes's behalf.

November 13, 2007

<u>Derivatives Broker 1:</u> [to Cash Broker 1] in these days of "**political**

correctness" is it true that there is a fair bit of pressure holding 6 mos libor down today? I

think this will probably suit.

January 28, 2008

<u>Derivatives Broker 1:</u> [Cash Broker 1's] libors..sees 1m and 3m

coming in unchanged ... 6m down 1/4bp....arbi has made him sent them out a bit higher,but

not confident he'll get them up

February 21, 2008

Senior Yen Trader: cu know what ineed arbitrage wise? you

<u>Derivatives Broker 1:</u> high 3m low 6m [Cash Broker 1] reckons 1m

could come off 1/2bp today (looks 1bp too high to him at the mom)....3m -1/8th.....6m -

1/8th

<u>Senior Yen Trader:</u> ok lets hope the arby works!

<u>Derivatives Broker 1:</u> well he has sent the same as yesterday, but just

warning us . .. when does your big 1m roll out?

2. R.P. Martin Brokers and UBS Senior Yen Trader Hayes Attempted to Conceal Their Improper Conduct Surrounding the Wash Trades

515. Former UBS Senior Yen Trader Hayes and R.P. Martin Yen Broker 1 were well aware of the improper nature of their conduct. First, they made an effort to avoid any written communications confirming the wash trades, choosing primarily to communicate via telephone. For example, former UBS Senior Yen Trader Hayes warned R.P. Martin to not put anything on chat:

December 3, 2008:

Senior Yen Trader: What I'm doing mate, don't f*cking put it on

chat.

Yen Broker 1: All right. Okay.

Senior Yen Trader: All right. Okay. 90 and three-eighths

Yen Broker 1: Oh, thank you very much, mate. I love you.

Senior Yen Trader: I just want it but don't put it on f*cking chat,

all right.

516. Second, as noted by another UBS Yen Trader that assisted former UBS Senior Yen Trader Hayes, they tried to hide the wash trades by "staggering" their execution, as noted in the example below, to avoid any "questions" about the trades:

February 25, 2009:

UBS Yen Trader: That's alright. **I thought it'd be -raise less**

questions, than if I did them at the same

time.

Yen Broker 1: Yeah, I understand that, thank you very much.

<u>UBS Yen Trader</u>: What I even did, I even, put on their, do a

[inaudible] like me, [Senior Yen Trader], [UBS Senior Yen Trader's Supervisor] and stuff. That people would actually, I would always put

traded it on there anyway.

Yen Broker 1: Ah, right

<u>UBS Yen Trader</u>: I do it for the people, I even just stagger that.

Just so if anyone ever questions it.

Yen Broker 1: Yeah. [inaudible] "geezer did us a favor, couple

of times, da da da." ***

- N. After the Contributor Bank Defendants Were Placed on Notice of Government Investigations into the Manipulation of U.S. Dollar LIBOR, Defendants

 Continued to Manipulate Yen-LIBOR, Euroyen TIBOR, and the Prices of Euroyen-Based Derivatives
- 517. Defendants continued their Euroyen manipulation long-after authorities had launched investigations into false reporting and manipulation of U.S. Dollar LIBOR. By way of example, RBS traders and submitters acknowledged internally by at least September 2010 that regulators were investigating false reporting of U.S. Dollar LIBOR, but nonetheless agreed that they were going to continue to manipulate Yen-LIBOR. RBS traders and submitters, however, recognized that they should be more careful to cover their tracks to avoid detection, including avoiding openly discussing in writing their manipulation of Euroyen while regulators were snooping around in U.S. Dollar LIBOR.
- RBS requests another RBS Yen Trader to contact the RBS's primary rate submitter "to push 6m [Yen] Libor up 2 bps to 44." The Yen-Trader responds: "ha...i will mention it ... no emails anymore" In another exchange, on November 22, 2010, a RBS Yen Trader and Senior Yen Trader acknowledge that "at the moment the FED are all over us about USD libors" but because they didn't "think anyone cares [about] JPY libor" at least "not yet" they acknowledged they had the green light to continue with their manipulation of Euroyen.
- 519. In another exchange on November 24, 2010, RBS's primary submitter warns an RBS Senior Yen-Trader to no longer put in writing his manipulative requests. The warning first appears in writing when the submitter diverts an instant message request from the Yen-Trader for an artificial Yen-LIBOR rate by responding spontaneously with the off-topic-question of: "how you doing with all the volatilities these days?", *i.e.*, code to change the subject. The trader responds "ok no prob....wouldn't want to cause any problem....thanks mate." Shortly after the

instant message exchange, in a follow up telephone conversation, the submitter is more blunt in his warning, saying "we're just not . . . allowed to have those conversations on [instant messages] . . . because of the BBA thing." After they had a good laugh about it, the submitter confirmed he is still on board with the manipulation, *i.e.*, submitting false Yen-LIBOR rates that benefitted the trader's Euroyen derivatives positions, saying: "So yeah, leave it with me, and uh, it won't be a problem." The trader responds "Ok, great."

- 520. The collusive manipulation in the Euroyen-based derivatives market had become so widespread that in the words of one of RBS's Senior Yen Traders, the banks setting Yen-LIBOR had become a "cartel."
- 521. UBS continued to engage in all of the manipulative conduct long after it was on notice that the CFTC was investigating UBS in connection with its U.S. Dollar LIBOR practices. UBS received a demand for documents and information from the CFTC's Division of Enforcement in October 2008; yet the conduct of the traders and submitters in relation to Euroyen (and other currencies), including collusive conduct, occurred well into 2010. The rampant misconduct across Yen-LIBOR, Euroyen TIBOR and other rates at UBS only came to light as a result of the CFTC's subsequent request in April 2010 that UBS conduct an internal investigation relating to its U.S. Dollar LIBOR practices. *See* Ex. A-2, p. 13.

O. <u>Defendants Obstructed Government Investigations and Lied to Their Attorneys during Their Own Internal Investigations of LIBOR Manipulation</u>.

522. Defendants also sought to obstruct investigations into the manipulation of LIBOR. For example, in December 2010, a UBS derivatives desk manager instructed a UBS LIBOR Submitter to lie when interviewed by UBS attorneys during the investigation into LIBOR manipulation. Among other things, the UBS derivatives desk manager instructed the UBS Submitter to:

- falsely claim that the UBS Yen trading desks did not have any derivative positions with exposure to Yen -LIBOR;
- avoid mentioning former UBS Senior Yen Trader Thomas Hayes;
- falsely indicate that the Yen-LIBOR submission process did not take into account trading positions;
- falsely claim that they never moved the Yen-LIBOR submissions to benefit the Yen trading desks;
- falsely claim that when contributing Yen-LIBOR submissions, UBS tried to be "as close to the market as possible."

P. <u>Legal Findings and Implications of Defendants' Manipulative and Collusive Conduct</u>

- 1. The CFTC Determined Yen-LIBOR and Euroyen TIBOR are Each a Commodity in Interstate Commerce.
- 523. On a daily basis, Defendants, through the transmission of an electronic spreadsheet to the service provider of the BBA and/or JBA who calculates their official fixings (e.g., Thomson Reuters), knowingly delivered or caused to be delivered its Yen-LIBOR and/or Euroyen TIBOR submissions through the mails or interstate commerce. Defendants' submissions were also caused to be delivered through the mails or interstate commerce through the daily dissemination and publication globally, including into the United States, of the panel banks' submissions as well as the daily official benchmark interest rates by at least Thomson Reuters on behalf of the BBA and/or JBA, and other third party vendors. The panel banks' submissions are, and were used during the Class Period, used to determine the official published rates for Yen-LIBOR and/or Euroyen TIBOR, which are calculated based on a trimmed average of the submissions. Defendants' daily Yen-LIBOR and/or Euroyen TIBOR submissions contained market information concerning the costs of borrowing unsecured funds in particular currencies and tenors, the liquidity conditions and stress in the money markets, and Defendant's ability to borrow funds in the Euroyen market. Such market information affects or tends to

affect the prices of commodities in interstate commerce, including the daily rates at which Yen-LIBOR and Euroyen TIBOR are fixed.

- 524. The Broker Defendants also knowingly caused to be delivered through the mails or interstate commerce false or misleading or knowingly inaccurate reports concerning Yen bank borrowing rates, through the form of Suggested LIBORs, which is market information that affects or tends to affect the fixing or pricing of Yen-LIBOR, a commodity in interstate commerce. Each business day, Yen-LIBOR panel banks, through the transmission of electronic spreadsheets to Thomson Reuters, made Yen-LIBOR submissions in contribution to the daily fixing of Yen-LIBOR for various tenors through the mails or interstate commerce. Yen-LIBOR panel banks' submissions were delivered through the mails or interstate commerce by the daily dissemination and publication globally, including into the United States, of the panel banks' submissions as well as the daily official Yen-LIBOR fixing by Thomson Reuters on behalf of the BBA and by other third party vendors. The panel banks' submissions are used to determine the official published rates for Yen-LIBOR, which are calculated based on a trimmed average of the submissions. The Yen-LIBOR panel banks' submissions contain market information concerning the costs of borrowing unsecured funds in Yen in particular tenors, the liquidity conditions and stress in the money markets, and the panel banks' ability to borrow Yen in the London interbank market. Such market information affects or tends to affect the prices of commodities in interstate commerce, including the daily rates at which Yen-LIBOR is fixed.
- 525. The Broker Defendants also understood and expected that many of the Yen-LIBOR panel banks relied on the market information disseminated by the Broker Defendants concerning, among other things, the Yen borrowing rates in the London interbank market.

 Specifically, ICAP brokers provided oral or written Yen-LIBOR predictions, *i.e.*, the "Suggested"

LIBORs," were supposed to represent an unbiased and honest assessment of Yen borrowing costs in the interbank market. However, to benefit certain ICAP clients, in particular the UBS Senior Yen Trader Tom Hayes, and to assist their efforts to attempt to manipulate the fixing of Yen-LIBOR on their behalf, ICAP Yen brokers often knowingly disseminated false, misleading and knowingly inaccurate market information to the Yen Panel banks through two primary means: (1) Cash Broker 1 and/or others brokers provided skewed Suggested LIBORs, through the daily Yen-LIBOR Run Thru emails or oral communications with submitters or traders at the Yen-LIBOR panel banks; and (2) ICAP brokers directly pressured Yen-LIBOR submitters and traders at panel banks to submit certain rates, that were skewed to reflect rates beneficial to the Senior Yen Trader and at times other traders. At times, certain Yen panel banks used ICAP's skewed Suggested LIBORs in determining and making their Yen-LIBOR submissions to the BBA. As a result, those Yen-LIBOR submissions were false, misleading or knowingly inaccurate because the panel banks' submissions purported to reflect the panel banks' perceived costs of borrowing Yen in the interbank market but in reality, reflected in whole or in part the rates that benefited the trading positions of ICAP's clients.

Trader and the RBS Yen Trader, and to assist their efforts to attempt to manipulate the fixing of Yen-LIBOR on their behalf, R.P. Martin Yen brokers at times often knowingly disseminated false, misleading and knowingly inaccurate market information to the Yen Panel banks through three primary means: (1) Yen Broker 1 or others provided skewed Suggested LIBORs through oral communications with submitters or traders at the Yen-LIBOR panel banks; (2) RP Martin brokers directly pressured Yen-LIBOR submitters and traders at panel banks to submit certain rates that were skewed to reflect rates beneficial to the Senior Yen Trader and at times other

traders; and (3) R.P. Martin brokers published "spoof" or nonexistent cash bids to the Euroyen-based derivatives market to benefit their clients, including clients who were Yen-LIBOR submitters, to give the Euroyen-based derivatives market false market price information that a Euroyen-based derivatives market participant was willing to trade Yen cash at a particular price. At times, certain Yen-LIBOR Contributor Banks used R.P. Martin's skewed Suggested LIBORs in determining and making their Yen-LIBOR submissions to the BBA. As a result, those Yen-LIBOR submissions were false, misleading or knowingly inaccurate because the panel banks' submissions purported to reflect the panel banks' perceived costs of borrowing Yen in the interbank market but in reality, reflected in whole or in part the rates that benefited the Euroyen-based derivative positions of R.P. Martin's clients.

- 527. Accordingly, the Broker Defendants' actions designed and intended to benefit clients and themselves, knowingly caused the panel banks to deliver through the mails or interstate commerce false or misleading or knowingly inaccurate market information that affects or tends to affect a commodity in interstate commerce, including Yen-LIBOR and violated Section 9(a)(2) of the Act, 7 U.S.C. § 13(a)(2) (2006).
 - 2. As Part of its Non-Prosecution Agreement with the DOJ, UBS Admits That False and Misleading Yen-LIBOR and Euroyen TIBOR Contributions Affected or Tended to Affect the Price of Commodities, Including Futures Contracts
- 528. As part of its Non-Prosecution Agreement with the DOJ, UBS admitted that when the requests of derivatives traders for favorable Yen-LIBOR and Euroyen TIBOR submissions were taken into account by the UBS rate submitters, UBS's rate submissions were false and misleading. Those false and misleading Yen-LIBOR and Euroyen TIBOR contributions affected or tended to affect the price of commodities, including futures contracts.

- 3. Defendants Admit They Entered Into Interest Rate Derivatives Contracts Tied To Yen-LIBOR and/or Euroyen TIBOR, Including Futures, Swaps and Forward Rate Agreements, With Counterparties in the United States
- 529. UBS entered into interest rate derivatives transactions tied to Yen-LIBOR and Euroyen TIBOR such as interest rate swaps, forward rate agreements, and futures with counterparties located in the United States. Those United States counterparties included, among others, asset management corporations, mortgage and loan corporations, and insurance companies.
- 530. RBS, Rabobank, Barclays, and Deutsche Bank also entered into interest rate derivatives transactions tied to Yen-LIBOR such as swaps and forward rate agreements with various counterparties, some of which were located in the United States. Those United States counterparties included, among others, asset management corporations, business corporations, insurance companies, universities and non-profit organizations as well as banks and other financial institutions in the United States or located abroad with branches in the United States.
 - 4. Defendants Admit They Successfully Manipulated Yen-LIBOR and/or Euroven TIBOR
- admitted that when UBS derivatives traders influenced the submissions of other Contributor

 Panel Banks either by (1) seeking and receiving accommodations from their counterparts at such banks, or (2) influencing the submissions from other banks with assistance from cash brokers who disseminated misinformation in the marketplace the manipulation of those submissions affected Yen-LIBOR and Euroyen TIBOR on various occasions. Similarly, as part of their Deferred Prosecution Agreements with the DOJ, Defendants RBS and Rabobank admitted that when its Yen-LIBOR derivatives traders made requests of RBS's Yen-LIBOR rate submitters in order to influence RBS's Yen-LIBOR submissions, and when the submitters

accommodated those requests, the manipulation of the submissions affected the resulting Yen-LIBOR fix on various occasions. In addition, when traders, former traders, and/or submitters, including some at RBS, agreed to coordinate requests for favorable Yen-LIBOR submissions, and when Yen-LIBOR submitters accommodated those requests, the manipulation of submissions affected the Yen-LIBOR fixing on various occasions.

- 5. The CFTC Has Determined That Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, Barclays, and Lloyds Successfully Manipulated Yen-LIBOR.
- 532. The CFTC has determined that, *inter alia*, Contributor Bank Defendants UBS, RBS, Rabobank, Lloyds, Deutsche Bank, and Barclays's submissions for Yen-LIBOR and/or Euroyen TIBOR were false, misleading or knowingly inaccurate because they were based in whole or in part on impermissible and illegitimate factors, including the Euroyen-based derivatives positions of their traders. By using these impermissible and illegitimate factors in making its Yen-LIBOR and/or Euroyen TIBOR submissions, Defendants conveyed false, misleading and/or knowingly inaccurate information while representing that the rates they submitted were truthful and reliable quotes based solely on the cost of borrowing unsecured funds in the relevant markets. Certain of Defendants' managers, traders and submitters at the very least knew that certain of their Yen-LIBOR and/or Euroyen TIBOR submissions contained false, misleading and knowingly inaccurate information concerning the submitted rates.
 - 6. The CFTC Has Determined that Broker Defendants ICAP and R.P. Martin Successfully Manipulated Yen-LIBOR.
- 533. The CFTC has determined that, *inter alia*, Broker Defendants ICAP and R.P. Martin communicated on a daily basis with banks that participated on the Yen-LIBOR panel and made submissions that purported to reflect their assessments of their respective banks' costs of borrowing unsecured funds in the London interbank market for Yen across tenors. The official

LIBOR fixings are calculated using a trimmed average methodology applied to the rates submitted by the panel banks. By virtue of this methodology, panel banks had the ability to influence or affect the rate that would become the official Yen-LIBOR fixing for any tenor. Accordingly, if the Broker Defendants could influence the rates submitted by the panel banks, then the Broker Defendants had the ability to influence or affect the rate at which Yen-LIBOR would be fixed. As alleged herein, Yen-LIBOR panel banks (in violation of BBA rules) relied upon the market information about Yen borrowing rates and Suggested LIBORs provided by the Broker Defendants, and, at times, at least certain panel banks used the rates suggested by the Broker Defendants in determining and making their submissions. As a result, at times, certain Yen-LIBOR panel banks made false or misleading Yen-LIBOR submissions.

- 7. The CFTC Has Determined that Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, and Lloyds Aided and Abetted the Manipulation of Yen-LIBOR.
- 534. The CFTC has determined that, inter alia, Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, and Lloyds aided also aided and abetted traders at other banks to manipulate Yen-LIBOR and/or Euroyen TIBOR. As evidenced by the extensive communications, Defendants traders and submitters and traders at other panel banks coordinated about Yen-LIBOR and/or Euroyen TIBOR rates that would benefit their banks' or their coconspirators respective derivatives trading positions. Also, the traders at the other panel banks or brokers on behalf of traders at other banks asked Defendants' traders to submit a certain rate, or submit a rate in a direction higher or lower, that would benefit the cash and derivatives trading positions of the traders at the other panel banks. Defendants' derivatives traders agreed and made the requests of their Yen-LIBOR and/or Euroyen TIBOR submitters, who in turn made their Yen-LIBOR and/or Euroyen TIBOR submissions based on the derivatives traders' or brokers requests. In addition, at least one RBS Yen trader knowingly assisted the UBS Yen Trader to

manipulate Yen-LIBOR by agreeing to act as counterparty to wash trades opposite UBS to provide extra brokerage commissions to the interdealer brokers as payment for their assistance in manipulating Yen-LIBOR.

- 8. The CFTC Has Determined that Broker Defendants ICAP and R.P. Martin Aided and Abetted the Manipulation of Yen-LIBOR.
- 535. The CFTC has determined that, *inter alia*, Broker Defendants ICAP and R.P. Martin aided and abetted and often coordinated with and assisted Euroyen-based derivatives traders at Yen-LIBOR panel banks, primarily the UBS Senior Yen Trader, to manipulate the official Yen-LIBOR fixings for certain tenors by at times causing panel banks to make Yen-LIBOR submissions at rates or levels that that would benefit the derivatives traders' trading positions. The Broker Defendants knew that the UBS Senior Yen Trader and other traders were trying to manipulate Yen-LIBOR to benefit their derivatives trading positions.
 - 9. The CFTC Has Determined Contributor Bank Defendants UBS, RBS, Rabobank, Lloyds, ICAP, R.P. Martin, Deutsche Bank, and Barclays Are Vicariously Liable for the Acts of their Employees in the Manipulation of Yen-LIBOR.
- 536. The CFTC has determined that Contributor Bank Defendants UBS, UBS Japan, RBS, RBS Japan, Rabobank, Lloyds, Deutsche Bank, and Barclays as well as Broker Defendants ICAP and R.P. Martin are liable for the acts, omissions and failures of the managers, traders, submitters, and/or brokers who acted as their employees and/or agents and in violation of Sections 6(c), 6(d) and 9(a)(2) of the CEA, 7 U.S.C. §§ 9, 13b and 13(a)(2).
 - 10. Contributor Bank Defendants UBS, RBS, Rabobank, Lloyds, Deutsche Bank, and Barclays Acknowledge Same in their Non-Prosecution and Deferred Prosecution Agreements with the DOJ.
- 537. As part of their Deferred and Non-Prosecution Agreements with the DOJ,
 Defendants UBS, RBS, Rabobank, Lloyds, Deutsche Bank, and Barclays each acknowledged
 that the wrongful acts described in the DOJ Statement of Facts taken by the participating

employees in furtherance of the misconduct were within the scope of their employment at their respective financial institution. UBS, RBS, Rabobank and Barclays also each acknowledged that the participating employees intended, at least in part, to benefit UBS, RBS, Rabobank, Lloyds and Barclays through the actions described in the DOJ SOF.

- 11. Contributor Bank Defendants UBS, RBS, Rabobank, Deutsche Bank, and Barclays Admit They Engaged in a Deceptive Course of Conduct When They Submitted or Caused to Be Submitted False and Misleading Yen-LIBOR and Euroyen TIBOR Submissions Designed to Derive Illicit Profits at the Expense of Their Counterparties and other Euroyen-Based Derivatives Participants.
- 538. As part of its Non-Prosecution Agreement with the DOJ, UBS admitted that its derivatives traders and submitters were engaged in a deceptive course of conduct in an effort to gain an advantage over their counterparties. As part of that effort: (1) derivatives traders and submitters submitted and caused the submission of materially false and misleading Yen-LIBOR and Euroyen TIBOR contributions; and (2) derivatives traders, after initiating and continuing their effort to manipulate Yen-LIBOR and Euroyen TIBOR, negotiated and entered into derivative transactions with counterparties that did not know UBS employees were often attempting to manipulate the reference interest rate.
- 539. As part of their Deferred Prosecution Agreements with the DOJ, Defendants RBS, Rabobank, and Deutsche Bank admitted that when the requests of derivatives traders for favorable Yen-LIBOR submissions influenced the RBS, Rabobank, and Deutsche Bank rate submitters' contributions, RBS', Rabobank's, and Deutsche Bank's Yen-LIBOR rate submissions were false and misleading. In making and in accommodating these requests, the derivatives traders and submitters (and RBS, Rabobank, and Deutsche Bank) were engaged in a deceptive course of conduct in an effort to gain an advantage over their counterparties. As part of that effort: (1) RBS, Rabobank, and Deutsche Bank derivatives traders and submitters

submitted, and caused the submission of, materially false and misleading Yen-LIBOR contributions; and (2) RBS, Rabobank, and Deutsche Bank derivatives traders, after initiating and while continuing their effort to manipulate Yen-LIBOR contributions, negotiated and entered into derivatives transactions with counterparties knowing that that those counterparties were unaware of the efforts by RBS', Rabobank's, and Deutsche Bank's employees to manipulate the relevant Yen-LIBOR rate.

- 540. As part of its Deferred Prosecution Agreements with the DOJ, Defendant Lloyds admitted that when its submitters made Yen-LIBOR submissions that took trading positions into account, Lloyds' Yen-LIBOR submissions were false and misleading. Those false and misleading Yen-LIBOR contributions affected or tended to affect the price of commodities, including futures contracts that were traded on commodities exchanges and used Yen-LIBOR as a reference rate. In making and accommodating the requests, the traders and submitters involved in the making of these false and misleading submissions (including those at Rabobank) were engaged in a deceptive course of conduct in an effort to gain an advantage over their counterparties. As part of that effort: (1) traders and submitters submitted and caused the submission of materially false and misleading Yen-LIBOR contributions; and (2) traders and submitters, both before and after initiating and continuing their effort to manipulate Yen-LIBOR contributions, negotiated and entered into transactions with counterparties that did not know that Lloyds employees were manipulating Yen-LIBOR.
- 541. When the request of Barclays's swaps traders for favorable LIBOR submissions were taken into account by the rate submitters, Barclays's rate submissions were false and misleading. In making and in accommodating the requests, the swaps traders and submitters were engaged in a deceptive course of conduct in an effort to gain an advantage over their

counterparties. As part of that effort: (1) swaps traders and submitters submitted and caused the submission of materially false and misleading LIBOR contributions; and (2) swaps traders, after initiating and continuing their effort to manipulate LIBOR, negotiated and entered into derivatives transactions with counterparties that did not know that Barclays employees were intending to manipulate LIBOR.

12. Defendants Admit They Were Competitors.

- 542. For example, as part of its Deferred Prosecution Agreement with the DOJ, RBS admitted that traders, former traders, and/or submitters at competing financial institutions, including RBS, agreed to coordinate and in fact coordinated with regard to Yen-LIBOR submissions, causing the manipulation of Yen-LIBOR on certain occasions. Because Yen-LIBOR was a pricing component of Euroyen-based derivatives contracts held by the financial institutions, the traders benefited from this agreement by affecting the profitability of the contracts on particular settlement dates.
 - Q. <u>Defendants Plead Guilty or Agree to Waive Indictment to Criminal Charges of Wire Fraud in Connection with Their Manipulation of the Prices of Euroyen-Based Derivatives.</u>
- 543. In connection with their unlawful manipulation of Yen-LIBOR and/or Euroyen TIBOR, Defendants UBS Japan and RBS Japan, agreed to waive indictment and plead guilty to a one-count criminal information filed in the District of Connecticut by the Criminal Division, Fraud Section, and the Antitrust Division of the DOJ charging each with wire fraud, in violation of 18 U.S.C. § 1343. As part of its Deferred Prosecution Agreement with the DOJ, RBS Japan's corporate parent RBS was also charged with wire fraud and price-fixing in violation of Section 1 of the Sherman Act. Defendant Rabobank also waived indictment to wire fraud as part of its own Deferred Prosecution Agreement with the DOJ. *See* Exs. A-4, B-3 and D-4.

1. UBS Japan.

Between approximately 2006 and at least 2009, in the District of Connecticut and 544. elsewhere, UBS Japan, the defendant, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, the defendant devised and engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about February 25, 2009, the defendant transmitted or caused the transmission of electronic communications—specifically, (1) an electronic chat between a derivatives trader employed by the defendant and a broker employed at an interdealer brokerage firm, (2) a subsequent Yen LIBOR submission from a bank to Thomson Reuters, and (3) a subsequent publication of a Yen LIBOR rate through international and interstate wires, at least one of which passed through, among other locations and facilities, servers located in Stamford, Connecticut.

2. RBS Japan.

545. Between approximately 2006 and at least 2010, in the District of Connecticut and elsewhere, RBS Japan, the defendant, through its employees, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds

for the purpose of executing such scheme and artifice, to wit, the defendant, through its employees, engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about October 5, 2009, the defendant transmitted or caused the transmission of electronic communications -- specifically, (1) an electronic chat between a derivatives trader employed by the defendant and a derivatives trader employed by the defendant's parent company, (2) a subsequent Yen-LIBOR submission from a bank to Thomson Reuters, and (3) a subsequent publication of a Yen-LIBOR rate—through international and interstate wires, at least one of which passed through, among other locations and facilities, servers located in Stamford, Connecticut.

3. Rabobank.

546. Between approximately 2005 and at least 2010, Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A., the defendant, through its employees, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, the defendant, through its employees, engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about April 17, 2008, the defendant transmitted or caused the transmission of electronic communications -- specifically, (1) an electronic chat between a derivatives trader and a money market trader, (2) a

subsequent Yen-LIBOR submission from the defendant to Thomson Reuters, and (3) a subsequent publication of a Yen-LIBOR rate through international and interstate wires.

4. Deutsche Bank

- 547. From at least as early as 2008 through at least 2010, the defendant, Deutsche Bank AG, through its employees, and its coconspirators, engaged in a combination and conspiracy in unreasonable restraint of interstate and foreign commerce. The aforesaid combination and conspiracy consisted of an agreement, understanding and concert of action among the Defendant and its coconspirators, the substantial terms of which were to fix the price of Yen LIBOR-based derivative products by fixing Yen-LIBOR, a key component of the price hereof, on certain occasions.
 - 5. Recently, UBS Waived Indictment and Pled Guilty After the DOJ Revoked a Non-Prosecution Agreement Based on UBS' Continued Market Manipulation and Serial Criminal Conduct
- 548. On December 18, 2012, the DOJ Criminal Division, Fraud Section, and UBS entered into a Non-Prosecution Agreement ("NPA") relating to UBS' submissions of LIBOR (including Yen-LIBOR), Euribor and Euroyen TIBOR ("IBOR Benchmarks") and manipulation of IBOR Benchmarks prior to 2011.
- 549. In the NPA, UBS agreed to "commit no United States crime" whatsoever for a period of two years from the execution date of the NPA and represented that it had, among other things, "strengthened its compliance and internal control standards and procedures" and "sought to effectively remediate any problems it [had] discovered."
- 550. Under the NPA, UBS paid a penalty of \$500 million and committed to real reformation of its operating practices in exchange for the Criminal Division's agreement not to prosecute UBS "for any crimes related to UBS's submissions of benchmark interest rates"

- 551. Rather than adhering to the terms of the NPA, UBS continued to manipulate commodity markets, this time in foreign exchange spot and precious metals markets. After the execution of the NPA, certain UBS employees engaged in "(i) fraudulent and deceptive currency trading and sales practices in conducting certain foreign exchange ("FX") market transactions with customers via telephone, email, and/or electronic chat to the detriment of UBS' customers and (ii) collusion with other participants in certain FX markets."
- 552. UBS, pursuant to the terms of the NPA, reported its continued manipulation to the DOJ, Criminal Division. The Criminal Division determined that UBS' conduct breached the NPA. In making its determination, the Criminal Division cited that UBS was a serial offender, having entered into multiple civil and regulatory settlements for violations.
- 553. Further, UBS' FX manipulation was the fourth U.S. criminal matter to come before the DOJ in the past six years. In addition to the IBOR Benchmark and the FX manipulation, in February 2009, UBS entered into a Deferred Prosecution Agreement with the DOJ Tax Division for conspiring to defraud the United States of tax revenue through secret bank accounts for U.S. taxpayers. In May 2011, UBS entered into a separate Non-Prosecution Agreement with the Antitrust Division relating to its involvement in bid-rigging in the municipal bond derivatives market.
- 554. Subsequent to the Criminal Division's declaration of a breach of the NPA, UBS entered into a plea agreement on May 20, 2015 ("May 2015 Agreement"). In the May 2015 Agreement, UBS waived indictment and agreed to plead guilty to one count of a wire fraud in furtherance of a scheme to defraud counterparties to interest rate derivatives transactions by manipulating Yen-LIBOR. UBS admitted that the factual allegations of the charging

information were true and reflected UBS' conduct in connection with IBOR Benchmarks, including Yen-LIBOR.

- 555. In addition to an obligation to cooperate with the Criminal Division and other undertakings, UBS also agreed to pay an additional criminal fine of \$203 million, and was to enter into a separate Cooperation and Non-Prosecution Agreement with the DOJ Antitrust Division relating to foreign exchange antitrust offenses.
 - R. <u>Defendants Former Traders and Brokers Have Been Criminally Charged with an Antitrust Violation, Wire Fraud and Conspiracy to Defraud Charges in the U.S. and U.K.</u>
 - 1. Former UBS and Citigroup Yen Trader Thomas Hayes and Former UBS Yen Trader Roger Darin
- 556. Hayes and another former UBS Trader, Roger Darin, have been charged by the DOJ with conspiracy to commit wire fraud, wire fraud and antitrust violations in connection with the manipulation of Yen-LIBOR. *See* Ex. A-6, Complaint filed in *U.S. v. Hayes et al.*, 12 MAG 3229 (S.D.N.Y. Dec. 12, 2012) (the "Hayes/Darin Criminal Complaint").
- 557. The Hayes/Darin Criminal Complaint includes numerous communications evidencing blatant market manipulation and illicit conspiratorial conduct between UBS and RBS, among others, while Hayes was employed at Defendant UBS. The Hayes/Darin Criminal Complaint also includes communications evidencing manipulative and conspiratorial conduct by Thomas Hayes after he left Defendant UBS to join Defendant Citigroup.
- 558. In June 2013, the U.K. SFO also charged former UBS and Citigroup trader Hayes with eight counts of conspiracy to defraud, directly implicating Defendants (i) UBS AG; (ii) Citigroup Global Markets Japan Limited, (iii) Deutsche Bank AG, (iv) UBS Japan, (v) JP Morgan Chase & Co., (vi) The Royal Bank of Scotland plc, (vii) HSBC and (viii) Rabobank, as

well as Broker Defendants (i) ICAP plc, (ii) R.P. Martin Holdings Limited and (iii) Tullett Prebon plc. Specifically the U.K. SFO alleges:

- a. Between December 1, 2009, and September 7, 2010, at within the jurisdiction of Central Criminal Court conspired together with other employees of Citigroup Global Markets

 Japan Limited and associated entities to defraud in dishonestly seeking to manipulate Yen

 London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by Citigroup as a contributing Panel Bank to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- b. Between December 1, 2009, and September 7, 2010, at within the jurisdiction of Central Criminal Court conspired together with employees of UBS AG, Deutsche Bank AG and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- c. Between December 1, 2009, and September 7, 2010, at within the jurisdiction of Central Criminal Court conspired together with employees of ICAP plc and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- d. Between December 1, 2009, and September 7, 2010, at within the jurisdiction of Central Criminal Court conspired together with employees of ICAP plc and others to defraud in

dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.

- e. Between August 8, 2006, and December 3, 2009, at within the jurisdiction of Central Criminal Court conspired together with other employees of UBS Japan and associated entities (together "UBS") to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by UBS as a contributing Panel Bank to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- f. Between August 8, 2006 and December 3, 2009 at within the jurisdiction of Central Criminal Court conspired together with employees of JP Morgan Chase & Co, The Royal Bank of Scotland Group plc, Deutsche Bank AG and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.
- g. Between August 8, 2006, and December 3, 2009, at within the jurisdiction of Central Criminal Court conspired together with employees of UBS AG, ICAP plc and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.

h. Between August 8, 2006, and December 3, 2009, at within the jurisdiction of Central Criminal Court conspired together with employees of UBS AG, R.P. Martin Holdings Limited, Tullett Prebon plc, Rabobank, HSBC and others to defraud in dishonestly seeking to manipulate Yen London Interbank Offered Rates and other interbank offered rates, by procuring or making the submission of rates by contributing Panel Banks to Thomson Reuters, with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another.

2. Former ICAP Brokers.

559. Three former ICAP brokers, Darrell Read, Daniel Wilkinson and Colin Goodman, have been charged by the DOJ with conspiracy to commit wire fraud and wire fraud in connection with the manipulation of Yen-LIBOR. *See* Ex. C-3. The DOJ alleges the three former ICAP brokers conspired with former UBS trader Hayes from July 2006 through September 2009. The same ICAP brokers were also charged by the U.K. SFO with conspiracy to defraud charges for their manipulation of Yen-LIBOR from August 8, 2006 through September 7, 2010.

3. Former R.P. Martin Brokers Terry John Farr and James Andrew Gilmour.

560. In July 2013, the U.K. SFO also charged former R.P. Martin broker Terry Farr and James Gilmour with conspiracy to defraud charges. Between August 8, 2006, and December 3, 2009, both Farr and Gilmour are alleged to have conspired to manipulate Yen-LIBOR and other interbank offered rates with, among others, former UBS trader Tom Hayes and fellow R.P. Martin broker James Gilmour, as well as other yet-to-be named traders and brokers at Defendants UBS, Tullett Prebon, Rabobank and HSBC. Farr is also alleged to have conspired

with Tom Hayes to manipulate Yen-LIBOR between January 12, 2009, and July 9, 2010, when Hayes was employed by Citi Group Global Markets.

4. Former Rabobank Traders.

561. Three former Rabobank traders, Paul Robson, Paul Thompson and Tetsuya Motomura have been charged by the DOJ with conspiracy to commit wire fraud, conspiracy to commit bank fraud, and wire fraud in connection with the manipulation of Yen-LIBOR from May 2006 through early 2011. *See* Ex. D-5. A fourth former Rabobank Trader, Takyuki Yagami, pleaded guilty to conspiracy to commit wire and conspiracy to commit bank fraud for his role in the conspiracy to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives.

V. <u>Defendants' Unlawful Conduct Has Also Led to Investigations, Issuance Of Findings of Misconduct and Administrative Sanctions With Governmental Authorities in the U.S. and Abroad</u>

- 562. Defendants' unlawful conduct has led to numerous government investigations, both domestically and abroad, including by the DOJ, CFTC, SEC, FSA, the Japanese Securities and Exchange Surveillance Commission, the Canadian Competition Bureau, the Swiss Competition Commission, Swiss financial market supervisory authority FINMA, the Monetary Authority for Singapore, BaFin, and the NYSDFS.
 - A. Recommendations and Findings by the Japanese Securities and Exchange
 Surveillance Commission and Administrative Action by the Japanese Financial
 Services Agency
- 563. The Japanese Securities and Exchange Surveillance Commission ("JSESC") conducted inspections on UBS Japan, Citigroup Global Markets Japan Inc., and RBS Japan, and found violations of the Japanese Financial Instruments and Exchange Act.

564. On December 9, 2011, the JSESC recommended that the Japanese Financial Services Agency ("JFSA") take administrative actions against Defendant UBS Securities Japan Ltd. (hereinafter "the JSESC Recommendation for Administrative Action Against UBS") as well as against Defendant Citigroup Global Markets Japan Inc. (hereinafter the "JSESC Recommendation for Administrative Action Against Citigroup").

1. UBS

565. The JSESC Recommendation for Administrative Action Against UBS provides as follows:

1. Contents of the Recommendation

Pursuant to Article 20, paragraph 1 of the Act for Establishment of the financial Services Agency (FSA), today, on December 9, 2011, the Securities and Exchange Surveillance Commission issued a recommendation that the Prime Minister and the Commissioner of the FSA take administrative action and any other appropriate measures against UBS Securities Japan Ltd. (hereinafter referred to as the "Company"). This recommendation is based on the findings of an inspection, whereby the following breach of laws and regulations by the Company was identified.

*Location Chiyoda-Ku Tokyo

Representative in Japan Mr. Toshiharu Kojima

Capital 60,000 million Yen

Number of officers and employees 822

Registration types Type I Financial Instruments Business

Operator

Type II financial Instruments Business

Operator

2. Summary of the findings

Inappropriate actions related to Euroyen TIBOR (hereinafter referred to as "TIBOR")

A yen rates trader at the Rates Department of the Fixed Income, Currencies and Commodities Division in the Company (at that time; hereinafter referred to as "Trader A") had continuously conducted approaches such as requesting a person in charge of submitting the TIBOR rates of UBS AG, Tokyo Branch (hereinafter referred to as "Submitting Personnel") to change its rates since around March 2007 at the latest, and also had continuously conducted approaches such as requesting persons in charge of submitting the TIBOR rates of other banks (hereinafter, including Submitting Personnel, referred to as "Submitting Personnel, etc.") since around February 2007 at the latest, for the purpose of fluctuating TIBOR so as to give advantages to the Derivative Transactions related to yen rates which Trader A was conducting.

The actions conducted by Trader A are acknowledged to be seriously unjust and malicious, and could undermine the fairness of the markets, considering that three-month TIBOR is the underlying asset of Three-month Euroyen Futures listed on Tokyo Financial Exchange Inc., Trader A conducted transactions of Three-month Euroyen Futures on Tokyo Financial Exchange Inc., and TIBOR is a significantly important financial index as a basic interest rate when banks raise or lend money. Therefore, the aforementioned actions conducted by Trader A are acknowledged to have a serious problem from the viewpoints of the public interest and protection of investors.

Furthermore, Trader A had also continuously conducted inappropriate approaches such as requesting to change the Yen-LIBOR rates that UBS group submitted, since around June 2007 at the latest.

The Company's internal control system is also acknowledged to have a serious problem, since the approaches have been overlooked for long periods and no appropriate measures have been taken.

As mentioned above, i) Trader A is acknowledged to conduct approaches against Submitting Personnel, etc. for Market Derivatives Transactions, which he was conducting under the Company's proprietary trading legally defined as Financial Instruments Business, ii) the actions are acknowledged to be unjust and malicious, from the viewpoints of the public interest and protection of investors, and could undermine the fairness of the markets, iii) Trader A conducted approaches regarding not only TIBOR but also Yen-LIBOR, and iv) the Company's internal control system is acknowledged to have a serious problem. Therefore, the Company's actions are acknowledged to fall under Article 52, paragraph 1(ix) of the Financial Instruments and Exchange Act, which stipulates "when a wrongful act or extremely unjust act has been conducted with regard to Financial Instruments Business, and when the circumstances are especially serious."

566. On December 16, 2011, based upon the JSESC Recommendation, the JFSA agreed to take administrative action against UBS. In particular, the JFSA issued a "Business

Suspension Order" requiring UBS Securities Japan to suspend trading in derivatives transactions related to Euroyen TIBOR and Yen-LIBOR from January 10 to January 16, 2012 (excluding transactions required to perform existing contracts).

567. The JFSA also issued a "Business Improvement Order" requiring UBS Securities
Japan to: "(a) Clarify the responsibility of management and staff regarding the violation. (b)
Secure strict compliance by all management and staff members. (c) Take preventive measures
against recurrence of the above-mentioned violations, including measures to improve the control
environment for governance and business operation. [and] (d) Submit a written report to the FSA
on the implementation of the above"

2. Citigroup/Citibank

568. The JSESC Recommendation for Administrative Action against Citigroup provides as follows:

1. Contents of the Recommendation

Pursuant to Article 20, paragraph 1 of the Act for Establishment of the Financial Services Agency (FSA), today, on December 9, 2011, the Securities and Exchange Surveillance Commission (SESC) issued a recommendation that the Prime Minister and the Commissioner of the FSA take administrative action and any other appropriate measures against Citigroup Global Markets Japan Inc. (hereinafter referred to as the "Company"). This recommendation is based on the findings of an inspection, whereby the following breaches of laws and regulations by the Company were identified.

*Location Chiyoda-Ku Tokyo

President and CEO Mr. Brian Mccappin

Capital 96,300 Million Yen

Number of officers and employees 729

Registration types Type I Financial Instruments Business

Operator

Type II financial Instruments Business Operator

2. Summary of the findings

(1) Inadequate response to the administrative order

In response to the order by the FSA pursuant to Article 56-2, paragraph 1 of the Financial Instruments and Exchange Act (FIEA), the Company submitted a report regarding the involvement of directors/employees in Euroyen TIBOR (hereinafter referred to as "TIBOR") and Yen-LIBOR. The SESC, through its inspection, verified the accuracy and sufficiency of the content of the report, and revealed that the report lacked a description of important matters regarding inappropriate approaches against submitting rates and contained an untruthful description, the conclusion of the report was derived from this untruthful description, and therefore the contents of the report were inappropriate.

The lack of important matters and the untruthful description in the report are acknowledged to violate the administrative order by the FSA Commissioner based on Article 56-2 of the FIEA, and the Company's actions related to the report are acknowledged to fall under Article 52, paragraph 1(vi) of the FIEA, which stipulates "violation of the disposition given by government agencies under laws and regulations pertaining to Financial Instruments Business."

(2) <u>Inappropriate actions related to TIBOR</u>

The Head of the G10 Rates in the Company (at that time; hereinafter referred to as "Director A") had continuously conducted approaches such as requesting a person in charge of submitting the TIBOR rates of Citibank Japan Ltd. (hereinafter referred to as "Submitting Personnel") to change its rates since around April 2010 at the latest, and a Yen Rates trader at the G10 Rates (hereinafter referred to as "Trader B") had continuously conducted approaches such as questioning persons in charge of submitting the TIBOR rates of other banks (or securities firms belonging to their financial conglomerates, hereinafter, including Submitting Personnel, referred to as "Submitting Personnel, etc.") since Trader B joined the Company in December 2009, for the purpose of fluctuating TIBOR so as to give advantages to the Derivatives Transactions related to yen rates which Director A and Trader B were conducting.

The actions conducted by Director A and Trader B are acknowledged to be seriously unjust and malicious, and could undermine the fairness of the markets, considering that three-month TIBOR is the underlying asset of Three-month Euroyen Futures listed on Tokyo Financial Exchange Inc., Director A and Trader B conducted transactions of Three-month Euroyen Futures on Tokyo Financial Exchange Inc., and TIBOR is a significantly important financial index as a basic interest rate when banks raise or lend money. Therefore, the aforementioned actions by Director A and Trader

B are acknowledged to have a serious problem from the viewpoints of the public interest and protection of investors.

Furthermore, Trader B had also continuously conducted inappropriate approaches such as requesting to change the Yen-LIBOR rates that Citibank group submitted, since December 2009.

In spite of recognizing these actions, the President and CEO (hereinafter referred to simply as the "CEO"), who was also responsible for the G10 Rates, overlooked these actions and the Company did not take appropriate measures, therefore, the Company's internal control system is acknowledged to have a serious problem.

As mentioned above, i) Director A and Trader B are acknowledged to have conducted approaches against Submitting Personnel, etc. for Market Transactions of Derivatives which they were conducting under the Company's proprietary trading legally defined as Financial Instruments Business, ii) the actions are acknowledged to be unjust and malicious, from the viewpoints of the public interest and protection of investors, and could undermine the fairness of the markets, iii) Trader B conducted approaches regarding not only TIBOR but also Yen-LIBOR, and iv) the Company's internal control system is acknowledged to have a serious problem. Therefore, the Company's actions are acknowledged to fall under Article 52, paragraph 1(ix) of the FIEA, which stipulates "when a wrongful act or extremely unjust act has been conducted with regard to Financial Instruments Business, and when the circumstances are especially serious."

(3) <u>Sales activity without necessary registration of a Sales Representative by a senior</u> executive

Director A had conducted Market Transactions of Derivatives since November 12, 2009.

However, the Company had not registered Director A as a Class-1 Sales Representative with Japan Securities Dealers Association, which is necessary to conduct Market Transactions of Derivatives, until June 16, 2010.

The CEO has not taken appropriate measures, such as directing related sections including the Compliance Division to address this issue, even after the CEO recognized that Director A conducted sales activities without necessary registration. Therefore, the Company's internal control system is acknowledged to have a serious problem.

The Company had the employee conduct duties of Sales Representatives without necessary registration. The aforementioned action of the Company is acknowledged to constitute a breach of Article 64, paragraph 2 of the FIEA.

- 569. On December 16, 2011, based upon the JSESC Recommendation, the JFSA agreed to take administrative action against Citigroup. In particular, the JFSA issued a "Business Suspension Order" requiring Citigroup to suspend trading in derivatives transactions related to TIBOR and Yen-LIBOR from January 10 to January 23, 2012 (excluding transactions required to perform existing contracts).
- 570. The JFSA also issued a "Business Improvement Order" requiring Citigroup to: "(a) Clarify the responsibility of management and staff regarding the violation. (b) Secure strict compliance by all management and staff members. (c) Take preventive measures against recurrence of the above-mentioned violations, including measures to improve the control environment for governance and business operation. [and] (d) Submit a written report to the FSA on the implementation of the above"
- 571. UBS and Citigroup did not deny the JSESC's findings. A UBS spokesperson stated the bank was taking the findings "very seriously" and had been "working closely with" the SESC and the JFSA "to ensure all issues are fully addressed and resolved." The UBS spokesperson also added, "We have taken appropriate personnel action against the employee involved in the conduct at issue." A Citigroup spokesperson similarly stated, "Citigroup Global Markets Japan takes the matter very seriously and sincerely apologizes to clients and all parties concerned for the issues that led to the recommendation. The company has started working diligently to address the issues raised."
- 572. *The Wall Street Journal*, in a February 7, 2012 article, reported that Thomas Hayes, who joined UBS in 2006 "and traded products linked to the pricing of short-term yendenominated borrowings" is the UBS trader referenced in the JSESC's Recommendation for Administrative Action against UBS. The same *Wall Street Journal* article reported that

Christopher Cecere, a former managing director and a trader for Citigroup Global Markets Japan Inc., as the Citigroup trader referenced in the JSESC's Recommendation for Administrative Action Against Citigroup. According to the *Wall Street Journal*, "Mr. Cecere supervised Mr. Hayes when the former UBS trader joined Citigroup in December 2009. The Japanese regulator concluded that Mr. Cecere was persuaded by Mr. Hayes to 'continuously conduct' attempts to influence the Tibor rate."

573. On February 10, 2012, the *Financial Times* reported that the manipulation of TIBOR was "uncovered after another Citi employee in London reported the activity." The *Financial Times* also reported that "Citi took a \$50m loss when it unwound the traders' positions and reported the matter to regulators. . . . However, other Citi sources suggested the losses were significantly in excess of that amount."

3. RBS

- 574. On April 12, 2013, the JFSA, based upon April 5, 2013 Recommendations for Administrative Actions by the JSESC, took administrative action against Defendant RBS Japan for a violation of the Financial Instruments and Exchange Act relating to RBS's submission of false Yen-LIBOR rates during the period from around middle 2006 to early 2010.
 - 575. The JFSA Administrative Actions against RBS Japan provides as follows:

1. Descriptions of the Recommendation

(1) <u>Inappropriate conducts related to Yen LIBOR</u>

From around middle of 2006 to early 2010, one trader at the Department of Short Term Market (at the time; hereinafter referred to as "Trader A") and his colleagues at RBS Securities continuously approached Yen LIBOR submitters of Royal Bank of Scotland plc (hereinafter referred to as "RBS plc") including through RBS plc's traders and made requests to change Yen LIBOR submissions in order to affect Yen LIBOR in favor of the derivative transactions by Trader A and his colleagues.

The above conducts of Trader A and his colleagues could undermine the market integrity, considering that Yen LIBOR is a significantly important financial index that

serves as a benchmark interest rate for various financial transactions. Therefore, the conducts are acknowledged to be seriously unjust and malicious and have a serious problem from the viewpoints of the public interest and protection of investors.

Furthermore, in light of the fact that RBS Securities has failed to identify these misconducts for a long period of time and has not taken any appropriate measures, it is acknowledged that its internal control system has serious deficiencies.

The conducts mentioned above in (1) are acknowledged to be unjust and malicious and have a serious problem from the viewpoints of the public interest and the investor protection, since (i) these conducts are recognized to be made in the course of RBS Securities' business operation and (ii) such conducts could undermine the market integrity. Furthermore, it is acknowledged that its internal control system has significant deficiencies. Therefore, it is acknowledged that the situation of RBS Securities' business operation is a case where administrative action is "necessary and appropriate for the public interest or protection of investors, with regard to a Financial Instruments Business Operator's business operation" as stipulated under Article 51 of the "FIEA".

B. Swiss Competition Commission Investigation

- 576. On February 3, 2012, the *Wall Street Journal* reported that UBS AG, Credit Suisse Group AG, Bank of Tokyo-Mitsubishi UFJ, Ltd., Citigroup Inc., Deutsche Bank AG, HSBC Holdings Plc, J.P. Morgan Chase & Co., Mizuho Financial Group Inc., Rabobank International, Royal Bank of Scotland Group Plc, Société Générale S.A., and Sumitomo Mitsui Banking Corp., among others, are under investigation by COMCO, the Swiss competition regulatory body, for colluding with one another to manipulate Euroyen TIBOR and Yen-LIBOR rates and the prices of interest rate derivatives benchmarked to these rates.
- 577. COMCO's investigation, like other government investigations, was prompted by information and documents provided by a leniency applicant [upon information and belief, by UBS] pursuant to COMCO's antitrust leniency program.
 - 578. According to a February 3, 2012 press release, COMCO reported that:

COMCO has received information regarding potential unlawful agreements among banks. Specifically, collusion between derivative traders might have influenced the reference rates LIBOR and TIBOR. Furthermore, market conditions regarding

derivative products based upon these reference rates might have been manipulated too. Hence, COMCO has opened an investigation against UBS and Credit Suisse, as well as against more than ten foreign financial institutions and other companies.

The Secretariat of COMCO ("Secretariat") received an application for its leniency program, which indicated that derivatives traders of various banks might have influenced the reference rates LIBOR and fixed with respect to certain currencies. The London Interbank Offered Rate (LIBOR) and the Tokyo Interbank Offered Rate (TIBOR) are reference rates which are aimed at reflecting the interest level in the interbank deposit market. The British Bankers' Association (for LIBOR) and the Japanese Bankers' Association (for TIBOR) calculate these rates on a daily basis, for a range of currencies, based on submissions by respective panel banks. Derivative traders working for a number of financial institutions might have manipulated these submissions by coordinating their behaviour, thereby influencing these reference rates in their favour. Moreover, derivative traders might have colluded to manipulate the difference between the ask price and the bid price (spread) of derivatives based on these reference rates to the detriment of their clients.

Beside the two major Swiss Banks, UBS and Credit Suisse, ten foreign banks (Bank of Tokyo Mitsubishi UFJ, Citigroup Inc., Deutsche Bank AG, HSBC Holdings plc, JP Morgan Chase & Co., Mizuho Financial Group Inc., Coöperative Centrale Raiffeisen-Boerenleenbank B.A., Royal Bank of Scotland Group plc, Société Générale S.A., Sumitomo Mitsui Banking Corporation) and other financial intermediaries are subject to this investigation led by the Secretariat.

C. <u>Disclosures Confirm the Existence of Investigations, Disclose Additional</u> <u>Investigations and/or Efforts to Reach Potential Settlements with Regulators</u>

- 579. In a Form 20-F filed with the SEC on July 23, 2012, Mitsubishi UFJ Financial Group, Inc. disclosed that it has "received requests and subpoenas for information from government agencies in some jurisdictions, including the United States and Europe, which are conducting investigations into past submissions made by panel members, including us, to the bodies that set various interbank offered rates. We are cooperating with these investigations."
- 580. In an Interim Report published in July 2012, Defendant HSBC Holdings plc confirmed that various authorities and enforcement authorities around the world, including in the U.S., U.K. and Asia are conducting investigations related to submissions made by panel banks in connection with the setting of LIBOR and other interest rates. HSBC added that: "As certain

HSBC entities are members of such panels, HSBC and/or its subsidiaries have been the subject of regulatory demands for information and are cooperating with those investigations."

- 581. In a Form 10-Q/A dated August 9, 2012, JPMorgan Chase disclosed that it has received subpoenas and requests for documents and, in some cases, interviews, from the DOJ, CFTC, SEC, European Commission, FSA, CCB, and COMCO, relating to, among other matters, JPMorgan's submissions of Yen-LIBOR rates to the BBA and Euroyen TIBOR to the JBA.
- 582. On November 6, 2012, Defendant Citibank announced in its quarterly financial filing that the Monetary Authority for Singapore has launched an investigation of its LIBOR and related rate submissions. Citigroup disclosed that it has "received additional requests for information and documents from various domestic and overseas regulators and enforcement agencies, including the Monetary Authority for Singapore and a consortium of state Attorneys General."
- 583. In a update to a 2012 Registration Statement filed with the AMF on November 8, 2012, Defendant Société Générale disclosed that "Société Générale, along with other financial institutions, has received requests for information from several authorities in Europe, the United States and Asia, in connection with investigations regarding submissions to the [BBA] for setting certain [LIBOR] . . . as well as trading in derivatives indexed to various rates. Société Générale is cooperating fully with the investigating authorities."
- 584. In February 2013, a former yen money market derivatives trader during the Class Period at Barclays and Deutsche Bank published a book entitled <u>The Manipulation of the LIBOR fixing</u>, and the doubt over the artificial <u>TIBOR fixing</u> (Hideto "Eddy" Takata, Gentosha Renaissance, Inc., February 20, 2013). The former traded, Eddy Takata, alleges the large increase of Euroyen TIBOR over Yen-LIBOR since 2009 was the result of collusion amongst the

Euroyen TIBOR rate setting banks so that the banks could borrow Yen-LIBOR at a lower rate and lend at the higher Euroyen TIBOR rate.

D. <u>Dozens of Defendants' Employees Are Under Investigation and/or Have</u> Resigned, or Been Suspended, or Fired or Arrested

585. According to public reports, dozens of traders employed by the Contributor Bank and Broker Defendants have been fired or suspended or put under investigation by worldwide regulators for their alleged involvement in the manipulation of benchmark rates. Such firings, terminations, and/or announced investigations of individuals employed or affiliated with the Defendants include, but are not limited to the following:

1. RBS

- 586. According to public reports, Defendant RBS fired at least four employees in connection with their manipulation of Yen-LIBOR: Paul White, Andrew Hamilton, Neil Danziger, and Tan Chi Min.
- 587. Paul White was RBS's principal rate-setter for Yen-LIBOR. According to *Reuters*, Mr. White was fired by RBS in late 2011 in connection with his involvement in RBS's alleged manipulation of Yen-LIBOR.
- 588. Andrew Hamilton was an investment advisor for RBS in its London office.

 According to *Bloomberg*, Mr. Hamilton was fired by RBS on October 21, 2011.
- 589. Neil Danziger was a foreign-exchange trader for RBS in its London office.

 According to *Bloomberg*, Mr. Danziger was fired by RBS on October 21, 2011.
- 590. Tan Chi Min was the head of short-term interest rate trading for Yen at RBS and the head of Delta One trading in Singapore. Tan was fired on in November 2011.
- 591. In addition, other RBS traders have been implicated in the manipulation of Yen-LIBOR. According to CCB Officer Brian Elliott's May 18, 2011 affidavit, Brent Davies, an

RBS trader, was one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A explained to Mr. Davies who his collusive contacts were and how he had and was going to manipulate Yen-LIBOR. Trader A also communicated his trading positions, his desire for certain movement in Yen-LIBOR and gave instructions for Mr. Davies to get RBS to make Yen-LIBOR submissions consistent with Trader A's wishes. Mr. Davies acknowledged these communications and confirmed that he would follow through. Trader A and Mr. Davies also entered into transactions that aligned their trading interest in regards to Yen-LIBOR.

- 592. In addition, Will Hall, a derivatives trader at RBS in London, was named in Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A communicated to Mr. Hall his trading positions, his desire for a certain movement in Yen-LIBOR and instructions to get RBS to make Yen-LIBOR submissions consistent with his wishes, and Mr. Hall agreed to do this.
- 593. Todd Morakis was RBS's Singapore-based head of trading for emerging markets.

 According to documents filed in the Singapore litigation, Mr. Morakis "orally confirmed to

 [Tan] around October [2011] that 'the practice of requesting to change the rate Libor is common in every rate setting environment in the banking industry."
- 594. Further, Jezri Mohideen, RBS head of rates trading and yen products, was suspended as a result of his involvement in the manipulation of Yen-LIBOR.

2. Citibank/Citigroup

595. Christopher Cecere was the head of G10 trading and sales for Asia at Citibank. The JFSA found that Mr. Cecere ("Director A" in the FSA administrative case) and another Citigroup trader engaged in "seriously unjust and malicious" conduct by asking bankers to alter data they submitted while setting a benchmark Japanese lending rate [*i.e.*, Euroyen TIBOR].

Along with Cecere, Thomas Hayes was a Tokyo-based derivatives trader of yen-related products for Citibank.

- 596. The *Financial Times* reported that Mr. Hayes "attempted to pressure colleagues and employees at other banks involved in the rate-setting process for the Tokyo Interbank Offered Rate, or Tibor." In addition, Hayes "allegedly worked with …other traders to push submissions up or down for a benchmark interest rate called yen Libor." Hayes was fired by Citibank in 2010.
- 597. Brian McAppin was Citigroup's brokerage head in Japan. The Japanese investigation found that McAppin "overlooked" attempts by two traders to influence interest rates despite "recognizing these actions."
- 598. Citigroup Inc.'s head of Japan banking, Darren Buckley, resigned as chief executive officer of Citibank Japan Ltd., and Citigroup was forced to write off \$50 million dollars in losses when it unwound positions it held in Euroyen derivatives and reported the rate setting misconduct to regulators.
- 599. Thomas Hayes was fired by Citigroup less than a year after the bank hired him after an internal investigation revealed that Hayes had manipulated Yen-LIBOR.

3. UBS

- 600. Two former UBS traders, Thomas Hayes and Roger Darin have been criminally indicted by the DOJ.
- 601. On August 8, 2012, the *Wall Street Journal* reported that UBS has fired or suspended approximately 20 traders and managers following UBS's involvement in the manipulation of Yen-LIBOR and Euroyen TIBOR. The *Financial Times* also reported that Yvan Ducrot, co-head of UBS's rates business, and Holger Seger, the global head of short-term interest rates trading at UBS, were both suspended by UBS.

- 602. On January 9, 2013, *Bloomberg* reported that UBS has "dismissed, penalized or reprimanded" over 40 people. About 18 people have lost their jobs and UBS has "taken action" against 40 people.
- 603. Two former UBS traders in Singapore, Mukesh Kumar Chhaganlal (UBS's former co-head of macro-trading for emerging markets in Asia) and Prshant Mirpuri (a former UBS executive director) each claimed in separate lawsuits against UBS that they were fired in a bid by UBS to cover up its role in the manipulation of Yen-LIBOR and Euroyen TIBOR.

4. JPMorgan

- 604. Paul Glands was a derivatives trader with JPMorgan Chase in London. He was named in CCB Officer Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A communicated to Mr. Glands his trading positions, his desire for a certain movement in Yen-LIBOR and instructions to get JPMorgan Chase to make Yen-LIBOR submissions consistent with his wishes, and Mr. Glands agreed to do so.
- 605. Stewart Wiley was a derivatives trader with JPMorgan Chase in London. He was named in CCB Officer Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A communicated to Mr. Wiley his trading positions, his desire for a certain movement in Yen-LIBOR and instructions to get JPMorgan Chase to make Yen-LIBOR submissions consistent with his wishes, and Mr. Wiley agreed to do so. According to the Canadian Competition Law Officer Brian Elliott's May 18, 2011 affidavit, the Cooperating Party's Trader A also asked if Paul Glands or Stewart Wiley required certain Yen-LIBOR submissions to aid their trading positions.

5. Deutsche Bank

- Officer Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Trader A communicated to Mr. Adolph his trading positions, his desire for a certain movement in Yen-LIBOR and instructions to get Deutsche to make Yen-LIBOR submissions consistent with his wishes, and Mr. Adolph agreed to do so. Further, according to the affidavit, Mr. Adolph shared his trading positions with Trader A. Trader A also aligned his trading positions with Mr. Adolph to align their interests in respect of Yen-LIBOR. Mr. Adolph was fired by Deutsche in December 2011 for conspiring with former UBS Trader Tom Hayes to manipulate Yen-LIBOR.
- 607. In January 2013, Deutsche Bank announced that it fired at least two traders in connection with LIBOR-rigging.
- 608. On November 28, 2012, *The Wall Street Journal* reported that Deutsche had admitted to the German Parliament that it failed to uphold interest rate reporting standards.

6. HSBC

609. Peter O'Leary was a HSBC derivatives trader who was named in CCB Officer Elliott's May 18, 2011 affidavit as one of the traders believed to be involved in the manipulation of Yen-LIBOR. According to the affidavit, Mr. O'Leary was instructed by Trader A at UBS "to get HSBC to make Yen-LIBOR submissions consistent with his wishes."

7. Barclays

610. Following the announcement of the Barclays Settlement, Chairman Marcus Agius, Chief Executive Officer Robert Diamond, and Chief Operating Officer Jerry Del Missier resigned. On November 28, 2012, *The Wall Street Journal* reported that Defendant Barclays had disciplined 13 members of its staff for their involvement in LIBOR rate-fixing.

8. Bank of Tokyo-Mitsubishi UFJ/Mitsubishi UFJ Financial Group

- 611. Christian Schluep was suspended by Defendant Bank of Tokyo-Mitsubishi UFJ. Schluep joined Bank of Tokyo-Mitsubishi UFJ after serving as a derivatives trader at Rabobank from December 2003 until October 2008.
- 612. Paul Robson was suspended by Defendant Bank of Tokyo-Mitsubishi UFJ for his alleged involvement in the manipulation of Yen-LIBOR and the prices of Euroyen-based derivatives. Robson was a former derivatives trader at Defendant Rabobank for eight years (from approximately 2001 through August 2009). As alleged above, Robson was criminally charged with conspiracy to commit wire fraud and bank fraud as well as wire fraud by the DOJ in connection with the manipulation of Yen-LIBOR from May 2006 through early 2011.
- 613. In August 2012, Defendant Mitsubishi UFJ Financial Group Inc. suspended a third London-based banker who was in charge of submitting Defendant Mitsubishi UFJ Financial Group Inc.'s LIBOR rates.

9. Rabobank

614. On July 27, 2012, *Reuters* reported that Defendant Rabobank fired four of its LIBOR submitters between 2008 and 2011 for their involvement in rate manipulation. The DOJ charged three former Rabobank traders, Paul Robson, Paul Thompson and Tetsuya Motomura with conspiracy to commit wire fraud and bank fraud, as well as wire fraud, all in connection with the manipulation of Yen-LIBOR from May 2006 through early 2011. *See* Ex. D-5. Another former Rabobank Yen derivatives trader, Takayuki Yagami, plead guilty to conspiracy to commit wire fraud and bank fraud for his role in the manipulation of Yen-LIBOR.

10. R.P. Martin

615. Terry Farr and Jim Gilmour, two former employees of interdealer broker R.P. Martin Holdings Ltd., have been arrested by the U.K. Serious Fraud Office and City of London police "in connection with the investigation into the manipulation of LIBOR."

11. ICAP

616. As alleged above, three former ICAP brokers, Darrell Read, Daniel Wilkinson and Colin Goodman have been criminally charged by the DOJ with conspiracy to commit wire fraud and wire fraud in connection with the manipulation of Yen-LIBOR.

12. Tullett Prebon

- 617. Noel Cryan was dismissed in September 2013 following Tullett Prebon's internal disciplinary hearings for gross misconduct and the manipulation of Yen-LIBOR. Cryan admitted "he had arranged [the trades]" with UBS. According to Cryan, managers at Tullett Prebon were aware of and encouraged the manipulation.
- 618. Cryan said that Tullett senior managers encouraged him to enter wash trades to generate illicit revenue for Tullett after Tullett saw commissions at a rival broker reach £100,000. One allegedly told him to "get involved."
- 619. Cryan also said that some of the wash trades were conducted after conversations by another Tullett Prebon broker with an RBS trader.

E. The BBA's and JBA's Re-Evaluation of Rate Setting Process

- 620. The rate-setting manipulation has prompted both the JBA and the BBA to reevaluate the Euroyen TIBOR and Yen-LIBOR rate-setting process.
- 621. In July 2012, the JBA requested that all banks that submit Euroyen TIBOR rates review the status of compliance with the guidelines for the publication of Euroyen TIBOR and is

considering reforming the rate-setting process. According to public reports, the JBA is in the process of drafting measures to ensure the legitimacy of Euroyen TIBOR.

- 622. In connection with the JBA's review of the Euroyen TIBOR setting process, the JFSA announced that because "the illegal manipulation of interest rates is an important matter that could undermine trust in the fairness and transparency of the financial market, [the] FSA will also keep a close watch on the JBA's activities with strong consciousness of this matter." The JFSA also reminded market participants that the JFSA "will continue to check individual financial institutions' internal control systems related to the submission of interest rates through inspection and supervision, and if a problem is recognized, [the JFSA] will take appropriate action in light of laws and regulations."
- 623. Remarking on an August 2012 review of allegations of LIBOR-rigging by the FSA, the managing director of the FSA, Martin Wheatley, said that maintaining the current system for setting LIBOR "was not a viable option."
- 624. On September 24, 2012, CFTC Chairman Gary Gensler told a hearing of the European Parliament's Economic and Monetary Affairs Committee that the current rate setting process, in which there was no supervision or overview by regulators, left LIBOR "open to manipulation."
- 625. On September 25, 2012, it was announced that the BBA's governing council voted on September 13 to give up its role in setting LIBOR, reportedly opening the door for government involvement in the rate-setting process.
- 626. On February 25, 2013, the BBA formally voted to relinquish its role in the setting of LIBOR.

- 627. On March 14, 2013, the JBA said that, beginning in April 2013, it would set up a committee of banks and specialists to review the setting of Euroyen TIBOR amid global scrutiny into benchmark lending rates.
- 628. On November 27, 2013, *Reuters* reported that the JFSA convened a twelve (12) member advisory panel to study the credibility of Euroyen TIBOR and other financial indicators.
- a. A few of the advisory panel's proposals included: (a) stripping oversight for setting Euroyen TIBOR from the JBA, (b) shifting responsibility to the JFSA, or (c) setting up a new organization within its ranks to administer Euroyen TIBOR.
- 629. On February 1, 2014, the administration of LIBOR was transferred from the BBA to the Intercontinental Exchange Group ("ICE") to address the need for a new administrator of LIBOR highlighted by the Wheatley review.
- 630. On May 19, 2014, *The Financial Times*, reported that Mikishi Daimon, an upperhouse member of the Japanese parliament said that banks could still be keeping Euroyen TIBOR artificially high. The *Financial Times* also reported "gaps between Tibor rates and rates in actual interbank transactions" revealing that in the first part of 2014, the actual market rate for three-month funds was .14% whereas three-month Euroyen TIBOR was significantly higher at .215%. The same report also revealed price anomalies in the spread between Yen-LIBOR and Euroyen TIBOR, showing that the average spread was 14 basis points between 2009 and 2012. However, this "gap narrowed sharply in the first three months of 2013" following criminal probes and allegations by former Barclays and Deutsche trader Eddy Takata that Japanese banks were conspiring to keep Euroyen TIBOR artificially high.

VI. A Dramatic Decrease in Variability Between the Quotes Among All Reporting Contributor Bank Defendants Evidences Collusion During The Class Period

- TIBOR and Yen-LIBOR Defendant panel banks' quotes began to decline significantly. The decline in volatility and variability accelerated further into the Class Period. This decrease and lack of volatility and variability supports the already revealed evidence of rate-setting collusion among the Contributor Bank Defendants. Dramatic decreases in variability and volatility in rate submissions, especially during times of financial crisis when uncertainty is high, is strongly indicative of collusion. *See* Rosa M. Abrantes-Metz *et al.*, *A Variance Screen for Collusion*, 24 Int'l J. Ind. Org. 467 (2006); Commission of the European Communities, Commission Staff Working Document, *Implementing the New Methodology for Product Market and Sector Monitoring: Results of a First Sector Screening*, (Nov. 11, 2007).
- 632. Figures 1 and 2 below are Intraday Coefficient of Variation analyses which measure the standard deviation divided by the mean of all daily quotes for Euroyen TIBOR and/or Yen-LIBOR submitted to the JBA and BBA, respectively. The intraday coefficient of variation analyses measure the variability of the quotes submitted by the Euroyen TIBOR and/or Yen-LIBOR Defendant panel banks, *i.e.*, how different (or how similar) the Contributor Bank Defendants' Euroyen TIBOR and/or Yen-LIBOR daily quotes are from each other on a given day when compared against each other. Figures 1 and 2 below measure all quotes submitted by the Defendant panel banks to the JBA and BBA, respectively ("All-Quotes"), including quotes in the compilation of Euroyen TIBOR and Yen-LIBOR rates ("Deciding Quotes").
- 633. Figures 1 and 2 demonstrate that during the pre-Class Period of January 2003 to December 2005, the variability of Euroyen TIBOR and/or Yen-LIBOR quotes submitted by Contributor Bank Defendants was high. Beginning with the start of the Class Period, the

variability and volatility among the quotes submitted by Contributor Bank Defendants declined and thereafter declined forcefully and materially, as compared to the period prior to the Class Period.

- 634. For example, on November 14, 2005, the coefficient of variation for Contributor Bank Defendants' Euroyen TIBOR quotes was 0.128 (all-quotes) and 0.0375 across the Deciding Quotes. By contrast, on June 27, 2006, the All-Quote coefficient of variation declined to 0.0262, while the deciding-quote coefficient of variation declined to 0.015. Throughout the remainder of the Class Period, the coefficient of variation for Euroyen TIBOR quotes, especially Deciding Quotes, remained significantly and materially lower than the coefficient of variation values that persisted prior to the Class Period.
- 635. The same held true for Yen-LIBOR. For example, on November 14, 2005, the coefficient of variation for Yen-LIBOR quotes was 0.2815 (all-quotes) and 0.0941 across the Deciding Quotes. By contrast, on June 27, 2006, the All-Quote coefficient of variation declined to 0.0547, while the Deciding-Quote coefficient of variation declined to 0.0149. Throughout the remainder of the Class Period, the coefficient of variation for Contributor Bank Defendants' Yen-LIBOR quotes remained significantly and materially below the values that persisted prior to the Class Period.
- 636. Furthermore, the variability and volatility of Contributor Bank Defendants' Euroyen TIBOR and Yen-LIBOR quotes stayed well below their pre-Class Period values during times of severe financial crisis.
- 637. For example, on August 9, 2007, a series of news stories came out representing the "official start" of the financial crisis. This news related to a liquidity and subprime mortgage crisis comprised of several key events, including: (1) a "coordinated intervention" by the

European Central Bank, the Federal Reserve Bank, and the Bank of Japan; (2) a warning by AIG that defaults were spreading beyond the subprime sector; and (3) a suspension by BNP Paribas of three funds that held mortgage-backed securities.

- 638. These events, which raised expected borrowing costs and expected interest rates and introduced a high level of financial uncertainty in the market place, should have caused an increase in the coefficient of variation among the Euroyen TIBOR and/or Yen-LIBOR submitted rates. That did not occur. Instead, the coefficient of variation among the quotes submitted by the Contributor Panel Banks remained suspiciously low.
- 639. In particular, on August 7, 2007, the coefficient of variation for the Contributor Panel Banks' Euroyen TIBOR All Quotes and Deciding Quotes was 0.0317 and 0.0111, respectively. On August 14, 2007, these values stood at 0.0357 and 0.0186, and then decreased to 0.0238 and 0.0098 on September 6, 2007. These values further decreased to 0.0167 and 0.0085 on September 12, all during a time of greater economic uncertainty and anxiety. For Yen-LIBOR, the coefficient of variation for the Yen-LIBOR All Quotes and Deciding Quotes was 0.0121 and 0.0055, respectively, on August 8, 2007. These values remained substantially the same throughout August 2007, for example standing at 0.0178 and 0.005 on August 13, 2007 and 0.0258 and 0.0158 on August 14, 2007, again all during a time of great economic uncertainty and anxiety in which these values should have increased considerably.
- 640. With the fall of Lehman Brothers in September 2008, the default risk of the Defendant panel banks significantly increased, not only because each became more likely to default due to severely impaired financial conditions, but also because of systemic risk (the risk of collapse of the overall financial system). Yet such drastic financial changes were not reflected in an increased variability of Contributor Panel Banks' Euroyen TIBOR and/or Yen-LIBOR

quotes. Instead, the coefficient of variation for the Euroyen TIBOR and/or Yen-LIBOR quotes remained suspiciously low and unresponsive to Lehman's collapse. For example, on September 11, 2008, the coefficient of variation for the Euroyen TIBOR and Yen-LIBOR Deciding Quotes was 0.0094 and 0.0127, respectively. On September 18, 2008, following the collapse of Lehman, these values actually decreased to 0.0091 and almost zero, respectively, and when considering all of the quotes these values were 0.22 and 0.017 for Euroyen TIBOR and Yen-LIBOR, respectively. *See* Figures 1 and 2 below.

FIGURE 1
Intraday Coefficient of Variation of Contributing Bank Quotes
3 Month EuroYen TIBOR

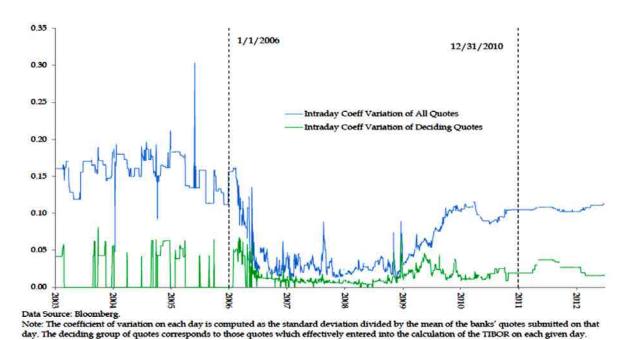
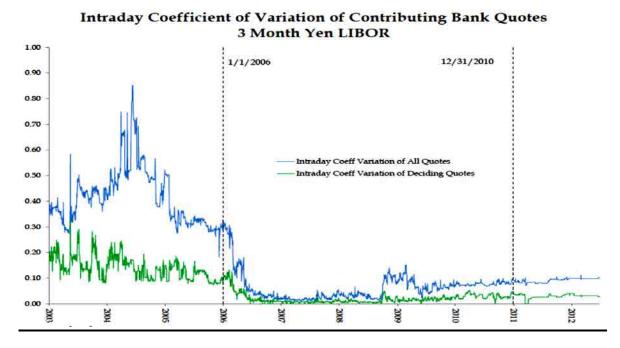


FIGURE 2



Bank who has not yet settled for its part in the conspiracy. This economic evidence reveals that each such Defendant's rate submissions to the Euroyen TIBOR and Yen-LIBOR panels lowered the collective coefficient of variation of all panel banks. That their contribution reduced the coefficient of variation provides strong economic indicia that these Defendants participated in collusive rate setting during the Class Period. For each such Contributor Panel Bank, Plaintiffs' economic analyses compared the difference between the intraday coefficient of variation for all of the Contributor Panel Bank quotes to the same measure when excluding one particular bank at a time, call it, Bank A. Where the comparator coefficient of variation is zero, adding Bank A's quote keeps the intraday coefficient of variation for all of the quotes at the same value. This result is evidence that Bank A behaved in accordance with the conspiracy by quoting rates equivalent to those of the colluding banks. The results of this analysis for these Contributor Panel Banks are shown in Figures 3-24, below.

- 642. When this comparison results in a negative value, the intraday coefficient of variation for all quotes excluding Bank A is larger than the intraday coefficient of variation for all of the quotes. Stated differently, when the quote for Bank A is added, the coefficient of variation is reduced, *i.e.*, the bank's rate submissions reduce the overall quote variability. This result is consistent with Bank A being part of the collusion that has been demonstrated by the economic and non-economic evidence described above.
- 643. From a statistical perspective, these individual studies of each Contributor Panel Bank yield results that are in consistent with independent action during the Class Period, given the reduced variation and unresponsiveness to various relevant market events. This evidence strongly suggests that each of these Contributing Panel Banks acted in a coordinated matter.

FIGURE 3

Contribution of Bank of Tokyo-Mitsubishi to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

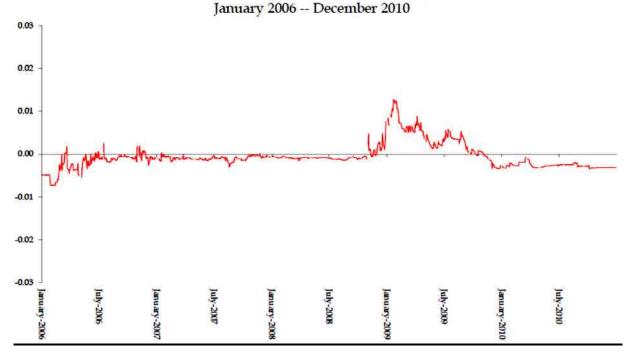


FIGURE 4

Contribution of Bank of Yokohama to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

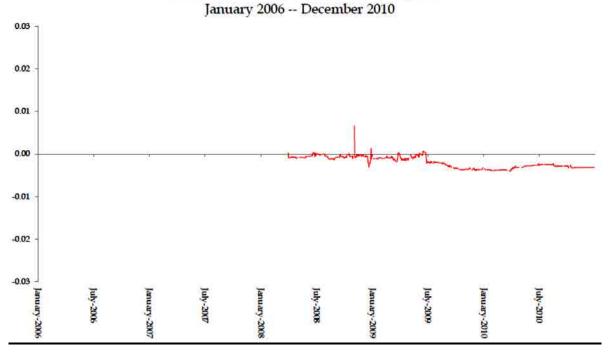


FIGURE 5

Contribution of Chuo Mitsui Trust to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

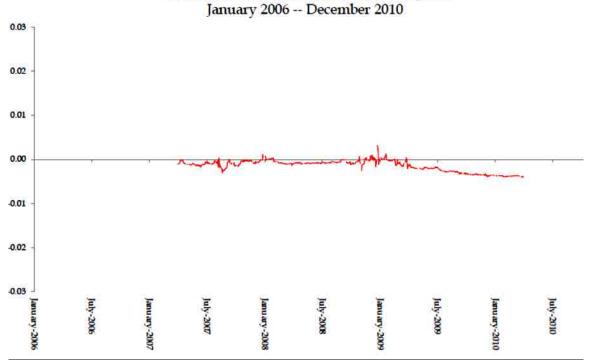


FIGURE 6

Contribution of Mitsubishi UFJ Trust to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

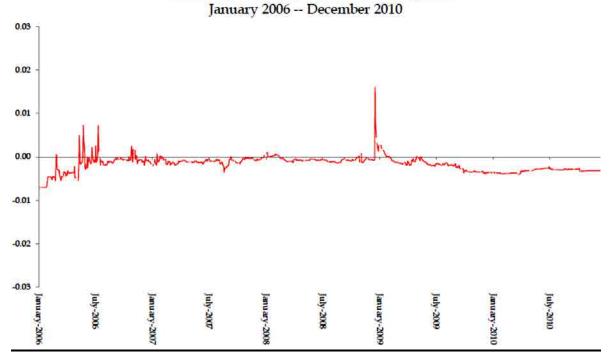


FIGURE 7

Contribution of Mizuho Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

January 2006 -- December 2010

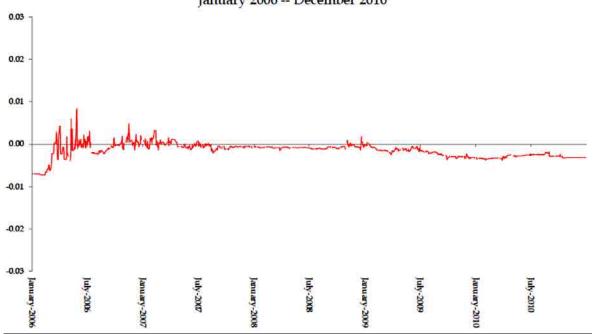


FIGURE 8

Contribution of Mizuho Corporate Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

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-0.03

July-2006

January 2006 -- December 2010

FIGURE 9

July-2008

July-2009

January-2009

January-2010

July-2007

Contribution of Mizuho Trust & Banking to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

January 2006 -- December 2010

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FIGURE 10

Contribution of Norinchukin Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

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FIGURE 11

Contribution of Resona Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

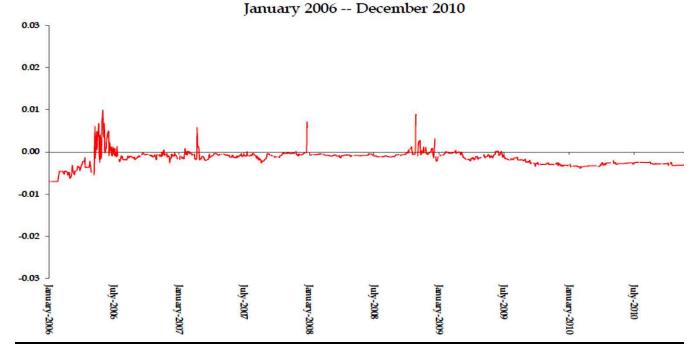


FIGURE 12

Contribution of Shinkin Central Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

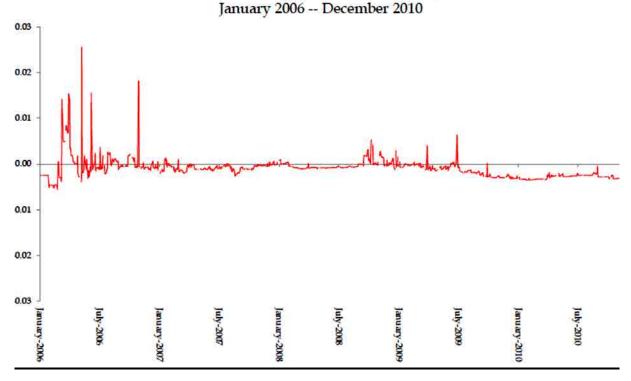


FIGURE 13

Contribution of Shoko Chukin Bank to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

January 2006 -- December 2010

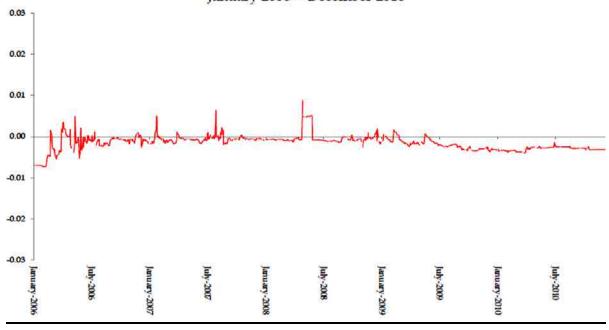


FIGURE 14

Contribution of Sumitomo Mitsui Banking Corp to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes January 2006 -- December 2010

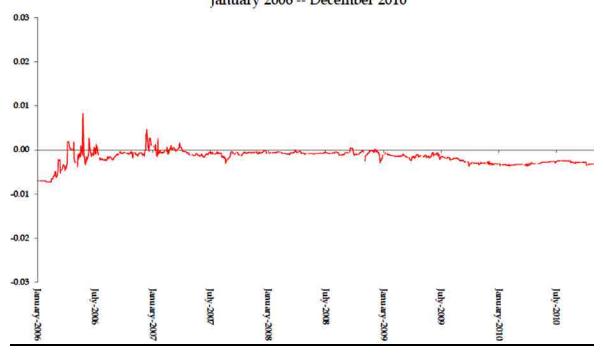


FIGURE 15

Contribution of Sumitomo Trust & Banking to the Intraday Coefficient of Variation of 3 Month EuroYen TIBOR Quotes

January 2006 -- December 2010

0.02

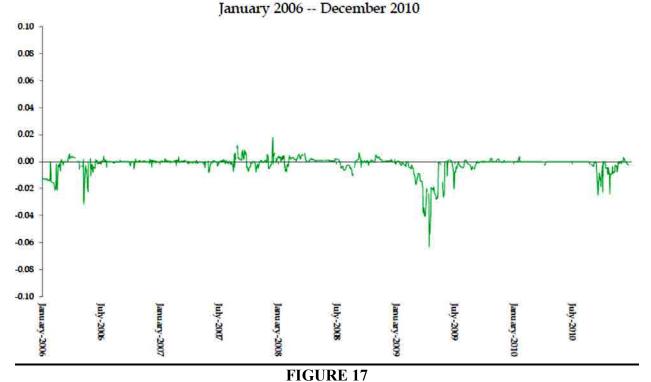
0.01

-0.02

-0.03

January 2006 -- December 2010

FIGURE 16
Contribution of Bank of Tokyo-Mitsubishi to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes



Contribution of Barclays to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes

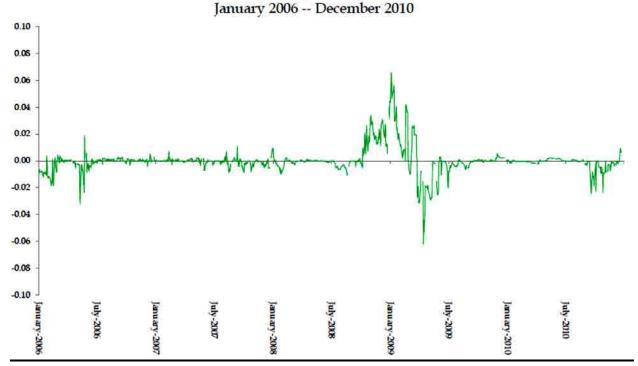


FIGURE 18

Contribution of HSBC to the Intraday Coefficient of Variation of 3 Month
Yen LIBOR Quotes

January 2006 -- December 2010

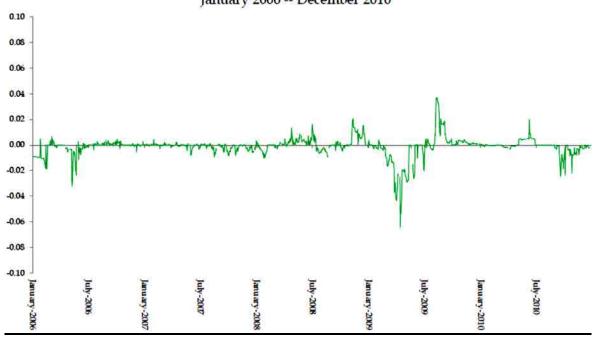
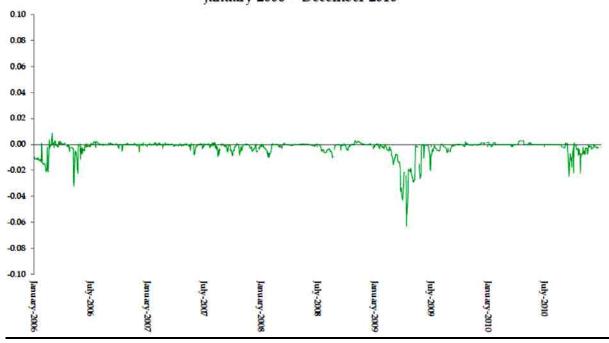
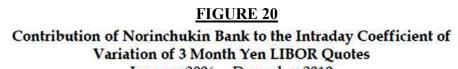


FIGURE 19

Contribution of Mizuho Corporate Bank to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes

January 2006 -- December 2010





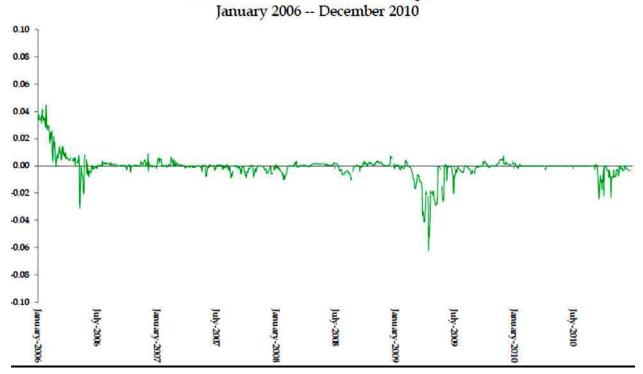


FIGURE 21

Contribution of Rabobank to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes

January 2006 -- December 2010

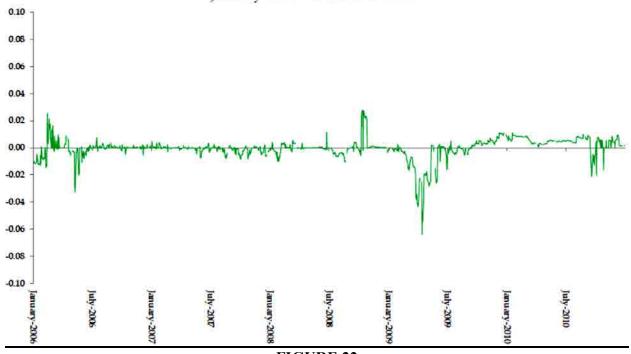


FIGURE 22

Contribution of Societe Generale to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes

January 2006 -- December 2010

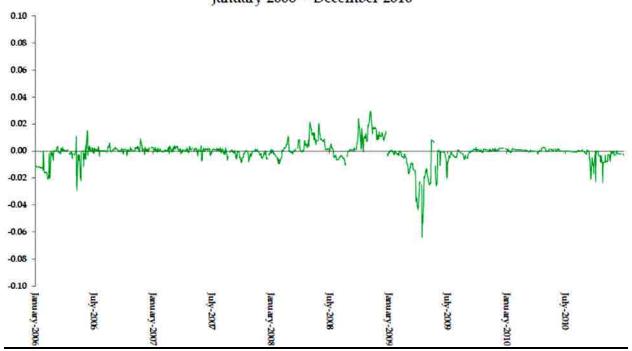


FIGURE 23
Contribution of Sumitomo Mitsui Banking Corp to the Intraday
Coefficient of Variation of 3 Month Yen LIBOR Quotes

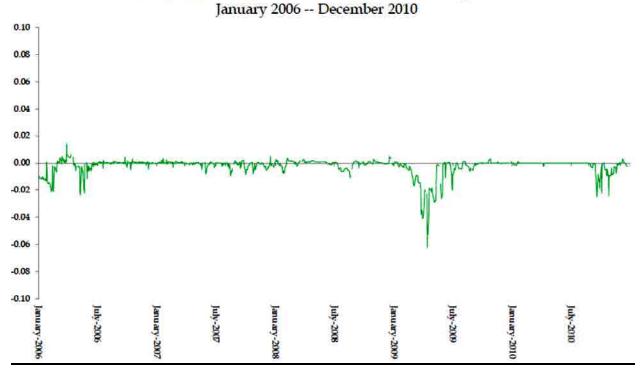
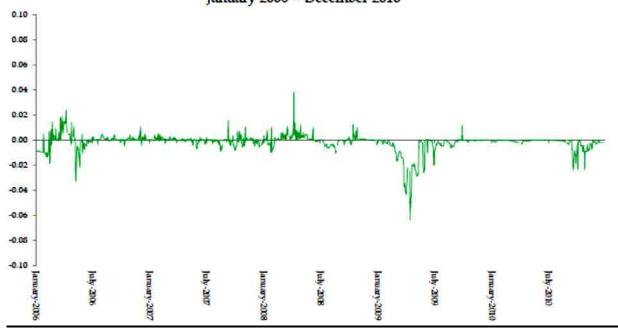


FIGURE 24

Contribution of Lloyds Banking Group to the Intraday Coefficient of Variation of 3 Month Yen LIBOR Quotes January 2006 -- December 2010



VII. Plaintiffs' Economic Analyses Show That Yen-LIBOR Impacted Euroyen TIBOR <u>During The Class Period</u>

644. Plaintiffs' economic analyses show that Yen-LIBOR impacted Euroyen TIBOR prices during the Class Period. In particular, Plaintiffs' economic analyses show that price discovery in the Euroyen market begins with the daily setting of Yen-LIBOR such that movements in Yen-LIBOR, specifically yesterday's Yen-LIBOR fix, impact changes in the following day's Euroyen TIBOR fix. As a result, the reporting of false and inaccurate Yen-LIBOR rates can (and did) cause artificial Euroyen TIBOR rates, and thus artificial Euroyen TIBOR futures contract prices, during the Class Period.

645. There is one active financial market for Euroyen-based derivatives and that market uses Euroyen TIBOR and Yen-LIBOR interchangeably. This highly synchronized and highly correlated relationship between Euroyen TIBOR and Yen-LIBOR is expected because "[i]n theory, the two rates should be very similar because they are both used as a reference for borrowing the same currency. ... Credit-market specialists agree that Tibor and yen Libor rates should be similar...." Financial Times, February 6, 2013, *Japanese Banks Accused of Tibor Fixing*. As noted in ¶ 673-675 and Figures 66-67, during the 36-month period of January 2003 and December 2005, the average spread of Euroyen TIBOR with respect Yen-LIBOR was a positive 0.024. Historical research indicates that integration in money markets is especially strong and that the Tokyo and London markets are almost completely integrated and the correlation between rates in similar currencies (including Yen) is extremely high. ⁸² Even during crises, when liquidity and other risks widened observed spreads due to liquidity factors, co-movement between the rates remained very high (correlation of changes remained high). ⁸³

⁸² Fukuda, Shin-ichi "Financial Crises and Risk Premiums in International Interbank Markets" Policy Research Institute, Ministry of Finance, Japan, Public Policy Review, Vol. 9, No. 1, January 2013.

⁸³ Fukuda, Shin-ichi "Regional and Global Short-term Financial Integration in Asia: Evidence From the Interbank

Various studies⁸⁴ show movement correlations as high as 99% even when there existed a spread between the two Euroyen rates.

Due to the integration and correlation of Yen money markets, traders, investors 646. and other users of Yen interest rates will use either Euroyen TIBOR or Yen-LIBOR interchangeably depending on the time of day as the reference to fix or set the rate underlying their Euroyen derivative. During New York and London trading hours, investors, and traders will generally use the Yen-LIBOR rate as the reference to fix or set the interest rate and during Tokyo trading hours traders and investors will generally use Euroyen TIBOR. The choice between Euroyen TIBOR and Yen-LIBOR is driven by when in the trading day the reference is made. Traders and investors have no expectation of a systematic difference between Euroyen TIBOR and Yen-LIBOR and investors and traders in Euroyen derivatives are indifferent to the underlying rate (Euroyen TIBOR or Yen-LIBOR) as long as both parties to the trade agree to the reference source. This indifference by traders and investors to use Euroyen TIBOR and Yen-LIBOR in a transaction exists because during the Class Period there existed a stable and continuous relationship and price transmission mechanism between Yen-LIBOR and Euroyen TIBOR. Without this relationship, there would have been systematic opportunities for risk free arbitrage between the two rates, a situation which did not exist. Arbitrage is the ability of traders and investors to take advantage of the same asset trading at different prices in different markets in a risk free manner. Traders and investors would naturally seek to erase opportunities for arbitrage and, in effect, arbitrage is kept out of markets by 'reflective trading' e.g. quoted prices for the same asset moving in tandem across different markets. As such, arbitrage opportunities

Markets Under The Crises" in M. Devereux, P.R. Lane, C.Y. Park, S.J. Wei eds., <u>The Dynamics of Asian Financial Integration</u>: Fact and Analytics, Routledge, 2011.

⁸⁴ Batten, Jonathan "Japanese Credit Risk and Trading Opportunities in the Euroyen Market" 2000.

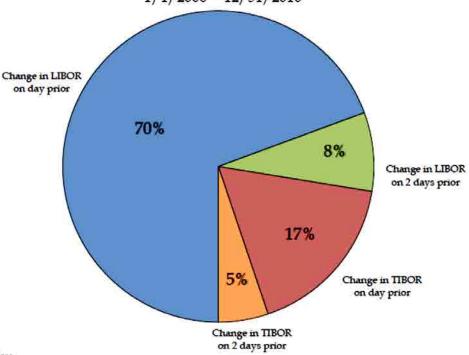
are prevented before they can even exist. In particular, market analysts have noted that even when there existed a spread between Yen-LIBOR and Euroyen TIBOR, it was a) systematically very low and b) very stable.

- 647. Historical analysis also shows that the Yen-LIBOR rate fix leads and indicates the Euroyen TIBOR fix in the following trading session and that this relationship is very stable. Furthermore, trading in Euroyen TIBOR futures are also driven by the Yen-LIBOR rate fix directly. Banks, investors and traders are fully cognizant of this relationship and rely on it.
- When futures exchanges are open at the same time, similar exchange traded futures contracts will exhibit similar pricing patterns (after accounting for tax or other "frictions") that erase the arbitrage opportunities. As such, the prices of exchange traded futures contracts move in tandem. In the case where there is not a futures markets, implied forward markets exist, such as those for currency. Interest rate futures on Euroyen TIBOR and interest rate forwards on Yen-LIBOR trade reflective of the other, while the two markets are open, in order to prevent arbitrage from taking place between the two contracts. There is an active Yen-LIBOR forward market (particularly in foreign exchange forwards) that result in a seamless transmission of the Yen-LIBOR rate into Euroyen TIBOR and Euroyen TIBOR futures. Otherwise, traders and investors would be able to extract risk free returns between the two contracts. The absence of an active futures contract for Yen-LIBOR means active trading in Euroyen money market rates is dominated by Euroyen TIBOR futures which directly reflect and follow Yen-LIBOR. A 3-month Yen-LIBOR futures contract exists but it is not used by the market reinforcing the fact that the markets view the Euroyen TIBOR futures market as completely integrated and interlocked with Yen-LIBOR such that the Euroyen TIBOR futures market is used as a hedging tool for Yen-LIBOR exposure.

- 649. Changes in Yen-LIBOR will be immediately reflected in Euroyen TIBOR rates (futures, etc.) once Euroyen TIBOR opens (after Yen-LIBOR trading closes) and the subsequent Euroyen TIBOR JBA rate. If they did not, there would be opportunities for arbitrage. Since the foreign exchange forwards reflect Yen-LIBOR, Yen-LIBOR rates are seamlessly transmitted to Euroyen TIBOR despite the time difference that exists between the London and Tokyo markets (currencies trade between the two market opening times). Because Yen foreign exchange forwards embody the changes in Yen-LIBOR, and transmit those changes to Euroyen TIBOR, arbitrage is effectively prevented from happening between Yen-LIBOR and TIBOR. Otherwise, there would be opportunities for arbitrage between Yen-LIBOR rates and foreign exchange forwards and/or Euroyen TIBOR rates and foreign exchange forwards.
- begins with the daily setting of Yen-LIBOR such that movements in Yen-LIBOR, specifically yesterday's Yen-LIBOR rate fix, impact changes in the following day's Euroyen TIBOR fix. As a result, the reporting of false and inaccurate Yen-LIBOR rates can (and did) cause artificial Euroyen TIBOR rates and artificial Euroyen TIBOR futures prices, during the Class Period. Euroyen TIBOR futures are the principal mechanism for active trading of Yen money market futures, for investment and hedging purposes such that any Yen-LIBOR reporting bank would know that a false Yen-LIBOR rate fix would impact Euroyen TIBOR futures prices. TIBOR futures (and TIBOR) themselves are seamless to the Yen-LIBOR fixing rates for the reasons stated (Yen-LIBOR is the dominant rate).
- 651. Figure 25 below demonstrates that changes in yesterday's Three-month Yen-LIBOR fix impacts by 70% the change in the next day Euroyen TIBOR rate.

FIGURE 25

Contribution of Past Changes in 3 Month EuroYen TIBOR and Yen LIBOR to Current EuroYen TIBOR given Last EuroYen TIBOR 1/1/2006 -- 12/31/2010



Data Source: Bloomberg.

Notes: This decomposition is based on an econometric model in which the change in the 3 Month EuroYen TIBOR on current day (from day t-1 to day t) is explained as a function of past changes in the LIBOR on the day prior (from t-2 to t-1) and on 2 days prior (from t-3 to t-2), and also as a function of past changes in the 3 Month EuroYen TIBOR on day prior (from t-2 to t-1) and on 2 days prior (from t-3 to t-2).

- 652. Yen-LIBOR is set during hours that US Dollar and Euro interest rate futures are also trading. Far more banks, and from many more countries, fix their funding rates during Yen-LIBOR hours than during Euroyen TIBOR hours and since more banks and other financial institutions that deal in many currencies set their effective rates during the Yen-LIBOR fix (when a majority of their home markets are open and when the largest volume of transactions occur), Yen-LIBOR is effectively set at that time. Euroyen TIBOR then reflects those changes after it opens.
- 653. Besides the dominance of interbank rate setting, London and New York dominate currency trading in the U.S. dollar, Euro and Japanese yen; foreign exchange forward rates are effectively set on Japanese yen in London trading hours when Yen-LIBOR is set (and are

derived from Yen-LIBOR). As a result of the dominant volumes of trading in Yen foreign exchange forwards, interbank interest rates and money markets during the London/New York market hours, Yen-LIBOR is the dominant rate, and effectively leads and predicts Euroyen TIBOR.

VIII. <u>Independent Analyses Demonstrate That Euroyen TIBOR and Yen-LIBOR Were</u> Artificial During The Class Period

654. Plaintiffs' analyses demonstrate that Euroyen TIBOR and Yen-LIBOR were artificial throughout the Class Period.

A. <u>Euroyen TIBOR and Yen-LIBOR Diverged Dramatically From their Historical</u> Relationship with the Euroyen Deposit Rate

- 655. Throughout the Class Period, Euroyen TIBOR and Yen-LIBOR diverged dramatically from their historical relationship with the Euroyen Deposit Rate (the "EYDR").
- 656. The EYDR is comprised of quotes for bids and asks of financial institutions seeking to transact in the 3-month Euroyen market. The EYDR is calculated on a daily basis by Bloomberg. Bloomberg collects actual transactions in 3-month Euroyen by a group of financial institutions, including banks and brokerages. Bloomberg published on a daily basis throughout the Class Period the lowest composite EYDR ask rate offered by active, contributing banks as well as a composite EYDR bid rate which is the highest bid rate offered by active, contributing banks. Bloomberg also publishes the mid-point between the composite ask and composite bid rates.
- 657. The EYDR is similar to Euroyen TIBOR and Yen-LIBOR except that the set of participating financial institutions is larger than the number of banks participating on the Euroyen TIBOR and Yen-LIBOR panels. Important market and financial fundamentals, such as day-to-day changes in monetary policy, market risk and interest rates, as well as risk factors facing the contributing banks should (absent manipulation) be reflected similarly in Euroyen

TIBOR, Yen-LIBOR and the EYDR, and therefore not cause the historical relationship between these rates to diverge. Significant de-linkages in the historical relationship between Euroyen TIBOR, Yen-LIBOR and the EYDR (as demonstrated in Figures 26 through 29 below) during the Class Period strongly indicates that Euroyen TIBOR and Yen-LIBOR rates were artificial.

- 658. Figures 26 and 27 below show the relationship, including spread relationship, between Euroyen TIBOR and the EYDR for the period of January 2003 through June 2012.⁸⁵
- 659. As demonstrated therein, before the start of the Class Period, between January 2003 and December 2005, the Euroyen TIBOR and the EYDR moved closely together with Euroyen TIBOR remaining slightly higher than the EYDR, causing the Euroyen TIBOR/EYDR spread to be slightly positive. In particular, during the 36-month period of January 2003 to December 2005, the average spread of Euroyen TIBOR with respect to the EYDR was a positive 0.0940.
- begins to increase at a much higher rate than Euroyen TIBOR thereby causing a collapse and eventual inversion of the spread between Euroyen TIBOR and the EYDR (*i.e.*, the spread turns negative as Euroyen TIBOR becomes higher than the EYDR). By July 3, 2006 the Euroyen TIBOR/EYDR spread stood at negative -0.031, and by February 21, 2007 the spread reached -0.092.
- 661. Further into the Class Period, the negative (inverted) spread between Euroyen TIBOR and the EYDR becomes larger and stays negative (inverted) until the end of April 2009, with a period of extraordinarily negative (inverted) spreads during the period of July 2008 through April 2009. In particular, by December 11, 2007, the Euroyen TIBOR/EYDR spread

⁸⁵ In Figure 27, the spread is calculated as the 3-Month Euroyen TIBOR minus the 3-Month EYDR.

had decreased to -0.216. An even lower point was reached on October 2, 2008, when the Euroyen TIBOR/EYDR spread reaches -0.879.

- 662. Further, from January 3, 2003 through December 31, 2005, there were 713 days with both a Euroyen TIBOR fix and an EYDR fix, and on no days was the spread negative during this time period. In contrast, and strongly evidencing Euroyen TIBOR artificiality, from January 1, 2006 through April 30, 2009, there were 796 days total of which 334 days (42.0%) had a negative spread. Further, from January 1, 2006 to April 30, 2009, there were 730 days out of the 796 days with spreads below the pre-Class Period historical average spread of 0.0940 (or 91.7% of the days).
- 663. Following April 2009, and continuing through to the end of the Class Period, the relationship between Euroyen TIBOR and the EYDR remained delinked from its pre-Class Period historical relationship, thereby evidencing Euroyen TIBOR artificiality. For example, from May 1, 2009 through December 31, 2010, there were 398 days with data available, 378 of which saw a spread greater than the Euroyen TIBOR/EYDR pre-Class Period historical spread average of 0.0940 (or 95.0% of the days). Further, on November 10, 2009, the Euroyen TIBOR/EYDR spread reached as high as 0.338, and on July 21, 2009, it reached as high as 0.335.

FIGURE 26

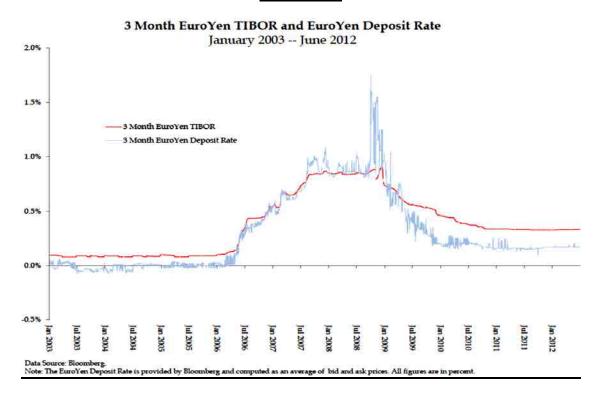
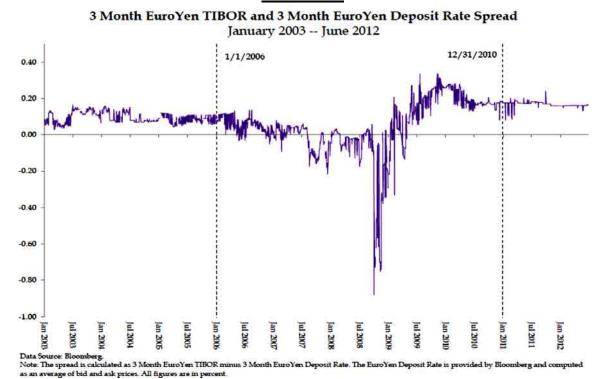


FIGURE 27



- 664. Similar breakdowns in the historical spread relationship between Yen-LIBOR and the EYDR occurred during the Class Period. Figures 28 and 29 below show the relationship, including spread relationship, between Yen-LIBOR and the EYDR for the period of January 2003 through June 2012.⁸⁶
- LIBOR and the EYDR moved closely together with Yen-LIBOR remaining consistently and slightly higher than the EYDR, causing the Yen-LIBOR/EYDR spread to be slightly positive. The average spread of Yen-LIBOR with respect to the EYDR ask rate for the 36 months prior to the Class Period (January 3, 2003 to December 31, 2005) was a positive 0.0480. During this pre-Class Period, there were 698 days of Yen-LIBOR submissions with EYDR ask quotes available. On only 22 days out of 698 days (or 3.2%) did a slightly negative spread between Yen-LIBOR and EYDR exist.
- 666. As demonstrated in Figures 28 and 29 below, by the start of the Class Period, the historical relationship between Yen-LIBOR and the EYDR begins to change. Further into the Class Period, the relationship becomes further materially de-linked, providing strong evidence of artificiality. For example, on December 11, 2007 the Yen-LIBOR/EYDR spread was -0.081; on October 2, 2008 it was -0.968; on July 14, 2009 it was -0.216, and on June 1, 2010 it was -0.108, or more than 100 basis points negative (and far from the historical slightly positive Yen-LIBOR/EYDR average spread of 0.0480 that existed during the 36 months that preceded the Class Period).

⁸⁶ In Figure 29, the spread is calculated as follows: the spread equals the 3 Month Yen-LIBOR minus the 3 Month EYDR.

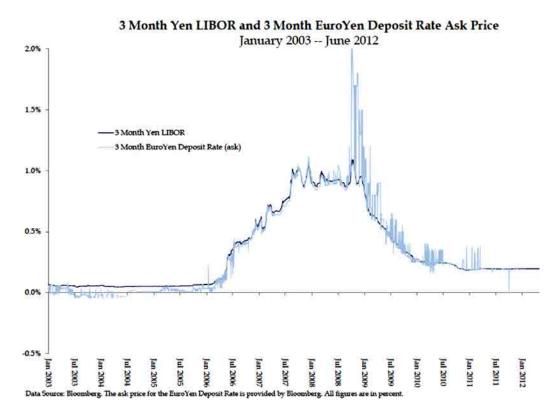
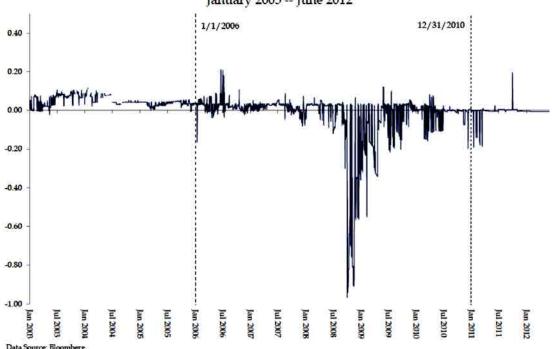


FIGURE 29
3 Month Yen LIBOR and 3 Month EuroYen Deposit Rate (ask) Spread
January 2003 -- June 2012



Note: The spread is calculated as 3 Month Yen LIBOR minus ask price of the 3 Month EuroYen Deposit Rate. The ask price of the EuroYen Deposit Rate is provided by Bloomberg. Spreads larger than 3.25 in magnitude occurred on 6 days and were excluded from this representation. All figures are in percent.

B. Analyses of the Defendant Banks' Euroyen TIBOR and/or Yen-LIBOR Quotes
Submitted During the Class Period, as Compared to the then Prevailing EYDR,
Further Demonstrates Artificiality

1. Euroyen TIBOR

- 667. Figure 30 below presents examples of quotes submitted by Defendant Euroyen TIBOR panel banks that were significantly lower than the-then prevailing EYDR, often by 75 basis points, and on certain instances nearly half the EYDR rate, further supporting Euroyen TIBOR artificiality during the Class Period.
- 668. For example, as illustrated in Figure 30, below, on October 2, 2008, Defendants Mizuho Trust & Banking, Resona Bank, and Sumitomo Trust & Banking submitted Euroyen TIBOR quotes of 0.81, 0.85, and 0.85, which were respectively lower than the prevailing EYDR of 1.75 by -0.94, -0.90, and -0.90. On November 11, 2008, Defendants Bank of Tokyo Mitsubishi, Bank of Yokohama, and Mizuho Bank submitted Euroyen TIBOR quotes of 0.77, 0.78, and 0.78, which were respectively lower than the prevailing EYDR of 1.55 by -0.78, -0.77, and -0.77. On November 12, 2008, Defendant Deutsche submitted a Euroyen TIBOR quote of 0.85 which was lower than the prevailing EYDR of 1.55 by -0.70. On November 17, 2008, Defendants JPMorgan and UBS submitted Euroyen TIBOR quotes of 0.82 and 0.81, which were respectively lower than the EYDR of 1.55 by -0.73 and -0.74. Each of the foregoing rate submissions resulted in negative spreads which diverged materially from the historical, pre-Class Period positive spread of 0.0940 between the Euroyen TIBOR and EYDR.

FIGURE 30

3 Month EuroYen TIBOR Quotes, EuroYen Deposit Rate and Associated Spread for Each Bank on Selected Days

			44 /44 /0000		44 /42 /2000			44.44.40000				
		0/2/200			/11/20		TIBOR EYDR Spread				1/14/20	
			Spread			Spread						Spread
Bank of Tokyo-Mitsubishi	0.87	1.75	-0.88	0.77	1.55	-0.78	0.78	1.55	-0.77	0.80	1.55	-0.75
	1	0/2/200	08	1	/11/20	08	11	1/12/20	08	11	1/17/20	08
	TIBOR	EYDR	Spread	TIBOR	EYDR	Spread	TIBOR	EYDR	Spread	TIBOR	EYDR	Spread
Bank of Yokohama	0.86	1.75	-0.89	0.78	1.55	-0.77	0.78	1.55	-0.77	0.80	1.55	-0.75
	10/2/2008		10/8/2008		11	11/11/2008		11/12/2008		08		
	-		Spread	-		Spread			Spread			Spread
Chuo Mitsui Trust	0.88	1.75	-0.87	0.88	1.60	-0.72	0.81	1.55	-0.74	0.81	1.55	-0.74
			10	,	7././201	0			1			1
		/21/201			7/6/201 EVDB			2/1/201 EVDB			2/8/201 EVDB	
Citibank	0.37	0.26	Spread 0.12	0.34	0.23	Spread 0.11	0.32	0.23	Spread 0.09	0.32	0.23	Spread 0.09
Citibalik	0.37	0.26	0.12	0.34	0.23	0.11	0.32	0.23	0.09	0.32	0.23	0.09
	10/2/2008				0/7/200			0/9/200		11/12/2008		
			Spread			Spread			Spread			Spread
Deutsche Bank	0.87	1.75	-0.88	0.87	1.60	-0.73	0.87	1.60	-0.73	0.85	1.55	-0.70
	1	0/2/200	08	1	0/9/200	08	11	1/14/20	08	11	1/17/20	08
	TIBOR	EYDR	Spread	TIBOR	EYDR	Spread	TIBOR	EYDR	Spread	TIBOR	EYDR	Spread
JP Morgan Chase	0.90	1.75	-0.85	0.90	1.60	-0.70	0.83	1.55	-0.72	0.82	1.55	-0.73
	1	0/2/200	18	1	0/6/200	18	1	0/9/200	18	11	1/11/20	08
	TIBOR					Spread			Spread	TIBOR		
Mitsubishi UFJ Trust	0.86	1.75	-0.89	0.86	1.60	-0.74	0.86	1.60	-0.74	0.80	1.55	-0.75
		0/2/200			/11/20			L/12/20			L/14/20	
M:I PI-			Spread			Spread			Spread			Spread
Mizuho Bank	0.86	1.75	-0.89	0.78	1.55	-0.77	0.78	1.55	-0.77	0.79	1.55	-0.76
	1	0/2/200)8	1	/11/20	08		1/12/20		_	1/17/20	
			Spread			Spread			Spread			Spread
Mizuho Corporate Bank	0.87	1.75	-0.88	0.79	1.55	-0.76	0.79	1.55	-0.76	0.80	1.55	-0.75
	1	0/2/200	10	1	0.77.7200	18	-1	0/9/200	16	11	/12 /20	ne
	1	0/2/200	00	1	0/7/200	,,,	1	0/9/200	10	1.	1/12/20	00
			Spread			Spread			Spread			Spread
Mizuho Trust & Banking												
Mizuho Trust & Banking	TIBOR 0.81	EYDR 1.75	Spread -0.94	TIBOR 0.83	EYDR 1.60	Spread -0.77	TIBOR 0.80	EYDR 1.60	Spread -0.80	TIBOR 0.81	EYDR 1.55	Spread -0.74
Mizuho Trust & Banking	0.81 1	EYDR 1.75 0/2/200	-0.94)8	0.83	EYDR 1.60 0/6/200	-0.77	0.80	EYDR 1.60 1/11/20	-0.80 08	0.81	EYDR 1.55 1/17/20	Spread -0.74
Mizuho Trust & Banking Norinchukin Bank	0.81 1	EYDR 1.75 0/2/200 EYDR	Spread -0.94	0.83	EYDR 1.60 0/6/200	Spread -0.77	0.80	EYDR 1.60 1/11/20	Spread -0.80	0.81	EYDR 1.55 1/17/20	Spread -0.74
	0.81 1 TIBOR 0.85	1.75 0/2/200 EYDR 1.75	Spread -0.94 08 Spread -0.90	0.83 1 TIBOR 0.85	1.60 0/6/200 EYDR 1.60	Spread -0.77 08 Spread -0.75	0.80 11 TIBOR 0.80	1.60 1/11/20 EYDR 1.55	Spread -0.80 08 Spread -0.75	11 TIBOR 0.81 TIBOR 0.80	1.55 1/17/20 EYDR 1.55	Spread -0.74 08 Spread -0.75
	1 TIBOR 1 TIBOR 0.85	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200	Spread -0.94 08 Spread -0.90	1 TIBOR 0.83 1 TIBOR 0.85 1	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200	Spread -0.77 08 Spread -0.75	11 TIBOR 0.80 11 TIBOR 0.80 11	EYDR 1.60 1/11/20 EYDR 1.55	Spread -0.80 08 Spread -0.75	11 TIBOR 0.81 TIBOR 0.80	EYDR 1.55 1/17/20 EYDR 1.55	Spread -0.74 08 Spread -0.75
Norinchukin Bank	1 TIBOR 0.81 1 TIBOR 0.85 1 TIBOR	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR	Spread -0.94 08 Spread -0.90 08 Spread	TIBOR 0.83 1 TIBOR 0.85 1 TIBOR	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR	Spread -0.77 88 Spread -0.75 08 Spread	11 TIBOR 0.80 11 TIBOR 0.80 11 TIBOR	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR	Spread -0.80 08 Spread -0.75 08 Spread	TIBOR 0.81 TIBOR 0.80 11 TIBOR	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR	Spread -0.74 08 Spread -0.75 08 Spread
	1 TIBOR 0.81 0.85 1 TIBOR 0.85 0.85	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75	Spread -0.94 08 Spread -0.90 08 Spread -0.90	1 TIBOR 0.85 0.85 0.85 0.85	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60	Spread -0.77 08 Spread -0.75 08 Spread -0.75	11 TIBOR 0.80 11 TIBOR 0.80 11 TIBOR 0.77	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55	Spread -0.80 08 Spread -0.75 08 Spread -0.78	11 TIBOR 0.81 11 TIBOR 0.80 11 TIBOR 0.79	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55	Spread -0.74 08 Spread -0.75 08 Spread -0.76
Norinchukin Bank	1 TIBOR 0.85 1 TIBOR 0.85 0.85 0.85	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201	Spread	1 TIBOR 0.83 1 TIBOR 0.85 1 TIBOR 0.85	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60	Spread -0.77	TIBOR 0.80 11 TIBOR 0.80 11 TIBOR 0.77	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55	Spread -0.80 08 Spread -0.75 08 Spread -0.78	TIBOR 0.81 TIBOR 0.80 11 TIBOR 0.79 5	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201	Spread -0.74 08 Spread -0.75 08 Spread -0.76
Norinchukin Bank Resona Bank	1 TIBOR 0.85 0.85 0.85 0.85 0.85 0.85 0.85	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR	Spread -0.94 8 Spread -0.90 8 Spread -0.90 0 Spread 0 Spread	1 TIBOR 0.83 1 TIBOR 0.85 1 TIBOR 0.85 1 TIBOR 1 TIBOR	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR	Spread -0.77 08 Spread -0.75 08 Spread -0.75 1 Spread	TIBOR 0.80 11 TIBOR 0.80 11 TIBOR 0.77 TIBOR	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR	Spread -0.80 08 Spread -0.75 08 Spread -0.78 1 Spread	TIBOR 0.81 TIBOR 0.80 11 TIBOR 0.79 5 TIBOR	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/55 1/22/201 EYDR	Spread -0.74 08 Spread -0.75 08 Spread -0.76 .2 Spread
Norinchukin Bank	1 TIBOR 0.85 1 TIBOR 0.85 0.85 0.85	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201	Spread	1 TIBOR 0.83 1 TIBOR 0.85 1 TIBOR 0.85	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60	Spread -0.77	TIBOR 0.80 11 TIBOR 0.80 11 TIBOR 0.77	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55	Spread -0.80 08 Spread -0.75 08 Spread -0.78	TIBOR 0.81 TIBOR 0.80 11 TIBOR 0.79 5	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201	Spread -0.74 08 Spread -0.75 08 Spread -0.76
Norinchukin Bank Resona Bank	1 TIBOR 0.85	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR	Spread -0.94	1 TIBOR 0.85	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR	Spread	11 TIBOR 0.80	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR	Spread -0.80	TIBOR 0.81 TIBOR 0.80 11 TIBOR 0.79 5 TIBOR 0.30	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/55 1/22/201 EYDR	Spread -0.74 08 Spread -0.75 08 Spread -0.76 12 Spread 0.10
Norinchukin Bank Resona Bank	11 TIBOR 0.85 0.85 0.85 0.85 0.36 0.36 0.36	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200	Spread	11 TIBOR 0.85 1 TIBOR 0.85 1 TIBOR 0.85 1 TIBOR 0.31 1 1	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200	Spread	118 OR 0.80 117 TIBOR 0.80 117 TIBOR 0.77 118 OR 0.31 117 TIBOR 0.31	EYDR 1.60 L/11/20 EYDR 1.55 L/11/20 EYDR 1.55 L/11/20 EYDR 0.23 L/12/20	Spread -0.80	TIBOR 0.81 TIBOR 0.80 11 TIBOR 0.79 5 TIBOR 0.30	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20	Spread -0.74
Norinchukin Bank Resona Bank	11 TIBOR 0.85 0.85 0.85 0.85 0.36 0.36 0.36	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200	Spread -0.94	11 TIBOR 0.85 1 TIBOR 0.85 1 TIBOR 0.85 1 TIBOR 0.31 1 1	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200	Spread -0.75	118 OR 0.80 117 TIBOR 0.80 117 TIBOR 0.77 118 OR 0.31 117 TIBOR 0.31	EYDR 1.60 L/11/20 EYDR 1.55 L/11/20 EYDR 1.55 L/11/20 EYDR 0.23 L/12/20	Spread -0.80	1180R 0.81 117 1180R 0.80 117 1180R 0.79 5 TIBOR 0.30	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland	11BOR 0.85 0.85 11TIBOR 0.85 0.85 11BOR 0.85 11BOR 0.36 11BOR 0.91	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.90	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200 EYDR 1.60	Spread	11BOR 0.80 0.80 0.80 0.80 0.77 11BOR 0.77 11BOR 0.31 11BOR 0.84	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55	Spread -0.80	11BOR 0.80 0.79 0.79 0.30 0.30 0.80 0.80 0.30 0.30 0.80 0.80	EYDR 1.55 L/17/20 EYDR 1.55 L/14/20 EYDR 1.55 L/22/201 EYDR 0.20 L/14/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland	11BOR 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.36 0.36 0.91	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR	Spread -0.94	11BOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.90	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200 EYDR	Spread	11BOR 0.80 0.80 0.80 0.80 0.77 11BOR 0.77 11BOR 0.31 11BOR 0.84	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55	Spread -0.80	11BOR 0.80 0.79 0.79 0.30 0.30 0.80 0.80 0.30 0.30 0.80 0.80	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20 EYDR	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland	11BOR 0.85 0.85 0.85 0.85 0.85 0.36 11 11BOR 0.36 0.91 11	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.85 11BOR 0.85 11BOR 0.85 11BOR 0.31 11BOR 0.90 11	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200 EYDR 1.60 0/6/200	Spread -0.77	11BOR 0.80 117 11BOR 0.80 117 11BOR 0.31 11BOR 0.84	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55	Spread -0.80	11BOR 0.80 0.79 0.30 11BOR 0.30 11BOR 0.30 11BOR 0.84 11	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank	11BOR 0.81 11BOR 0.85 11BOR 0.85 11BOR 0.86 11BOR 0.91 11BOR 0.90	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.83 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.90 11TIBOR 0.88	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60	Spread	11BOR 0.80 117 11BOR 0.80 117 11BOR 0.77 11BOR 0.31 117 11BOR 0.84 117 11BOR 0.78	EYDR 1.60 1.711/20 EYDR 1.55 1.711/20 EYDR 1.55 2.78/201 EYDR 0.23 1.712/20 EYDR 1.55 1.712/20 EYDR 1.55	Spread -0.80	11BOR 0.84 11TBOR 0.80 0.80 11TBOR 0.30 11TBOR 0.84 11TBOR 0.80 0.80 0.80	EYDR 1.55 1.77/20 EYDR 1.55 1.714/20 EYDR 1.55 1.722/201 1.720 EYDR 1.55 1.71/20 EYDR 1.55 1.77/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank	11BOR 0.85 0.85 11TIBOR 0.85 0.85 11BOR 0.86 11TIBOR 0.91 11TIBOR 0.91 11DOR 0.90	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.90 11TIBOR 0.88	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 1.60 1.60 1.60 1.60 1.60 1.60 1.60	Spread -0.77	11BOR 0.80 117 11BOR 0.80 117 11BOR 0.77 118 117 11BOR 0.31 117 11BOR 0.84 117 11BOR 0.78	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55	Spread -0.80	11 TIBOR 0.80 11 TIBOR 0.79 11 TIBOR 0.30 11 TIBOR 0.84 11 TIBOR 0.80 11	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20 EYDR 1.55 1/17/20 EYDR 1.55 1/17/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank Shoko Chukin Bank	11BOR 0.81 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.36 11TIBOR 0.91 11TIBOR 0.90	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.83 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 0/7/200 EYDR 1.60 0/8/200 EYDR 0.23 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 0/11/20	Spread	11BOR 0.80 117 11BOR 0.80 117 11BOR 0.77 11BOR 0.31 117 11BOR 0.84 117 11BOR 0.78 11BOR 0.78 117 11BOR 0.78 11BO	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55	Spread -0.80	110 N	EYDR 1.55 4/17/20 EYDR 1.55 4/14/20 EYDR 1.55 4/22/201 EYDR 0.20 4/14/20 EYDR 1.55 4/17/20 EYDR 1.55 4/17/20 EYDR 1.55 4/17/20 EYDR 1.55 4/14/20 EYDR	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank	11BOR 0.81 11BOR 0.85 11BOR 0.85 11BOR 0.36 11BOR 0.91 11BOR 0.90 11BOR 0.88	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75	Spread -0.94	TIBOR 0.83 1 TIBOR 0.85 1 TIBOR 0.85 TIBOR 0.31 1 TIBOR 0.90 1 TIBOR 0.88 1 TIBOR 0.79	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60 2/11/20 EYDR 1.60 1.60 1.60 1.55	Spread -0.77	11BOR 0.80 117 11BOR 0.80 117 11BOR 0.77 11BOR 0.31 117 11BOR 0.84 117 11BOR 0.78 117 11BOR 0.78 117 11BOR 0.79	EYDR 1.60 1.711/20 EYDR 1.55 1.711/20 EYDR 0.23 1.712/20 EYDR 1.55 1.712/20 EYDR 1.55 1.712/20 EYDR 1.55	Spread -0.80	11BOR 0.80 117 11BOR 0.79 117 11BOR 0.30 117 11BOR 0.84 117 11BOR 0.80 117 11BOR 0.80 117 11BOR 0.80	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 0.20 1/14/20 EYDR 1.55 1/17/20 EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank Shoko Chukin Bank	11BOR 0.81 11BOR 0.85 11TIBOR 0.85 11TIBOR 0.86 11TIBOR 0.91 11TIBOR 0.90 11TIBOR 0.88	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.83 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 0/8/200 EYDR 1.55	Spread	11BOR 0.80 117BOR 0.80 117BOR 0.77 118OR 0.31 117BOR 0.84 117BOR 0.78 117BOR 0.78 117BOR 0.79	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55	Spread -0.80	11 TIBOR 0.80 11 TIBOR 0.80 12 TIBOR 0.80 12 TIBOR 0.80 12 TIBOR 0.84 12 TIBOR 0.80 12 TIBOR 0.81 12	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20 EYDR 1.55 1/17/20 EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/14/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank Shoko Chukin Bank Sumitomo Mitsui Banking Corp	11BOR 0.81 11BOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.36 11TIBOR 0.91 11TIBOR 0.90 11TIBOR 0.88	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.83 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 0/7/200 EYDR 1.60 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.55 0/8/200 EYDR	Spread -0.77	11BOR 0.80 117 11BOR 0.80 117 11BOR 0.77 118 0.81 117 11BOR 0.31 117 11BOR 0.84 117 11BOR 0.78 117 11BOR 0.79 117 11BOR 0.79	EYDR 1.60 1.711/20 EYDR 1.55 1.711/20 EYDR 1.55 2./8/201 EYDR 0.23 1.712/20 EYDR 1.55	Spread -0.80	71BOR 0.80 117 118 0.80 0.80 0.80 0.80 117 118 0.80 0.80 117 118 0.80 0.80 0.80 0.80 0.81 118	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20 EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/14/20 EYDR 1.55 1/14/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank Shoko Chukin Bank	11BOR 0.81 11BOR 0.85 11TIBOR 0.85 11TIBOR 0.86 11TIBOR 0.91 11TIBOR 0.90 11TIBOR 0.88	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.83 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 2/1/201 EYDR 0.23 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 0/6/200 EYDR 1.60 0/8/200 EYDR 1.55	Spread	11BOR 0.80 117BOR 0.80 117BOR 0.77 118OR 0.31 117BOR 0.84 117BOR 0.78 117BOR 0.78 117BOR 0.79	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55 1/12/20 EYDR 1.55	Spread -0.80	11 TIBOR 0.80 11 TIBOR 0.80 12 TIBOR 0.80 12 TIBOR 0.80 12 TIBOR 0.84 12 TIBOR 0.80 12 TIBOR 0.81 12	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20 EYDR 1.55 1/17/20 EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/14/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank Shoko Chukin Bank Sumitomo Mitsui Banking Corp	11BOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.86 11TIBOR 0.90 11TIBOR 0.90 11TIBOR 0.88 11TIBOR 0.88	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.83 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.90 11TIBOR 0.90 11TIBOR 0.79 11TIBOR 0.79 11TIBOR 0.86	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 0/7/200 EYDR 1.60 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60 0/8/200 EYDR 1.60	Spread	TIBOR 0.80 117 TIBOR 0.80 117 TIBOR 0.77 TIBOR 0.31 117 TIBOR 0.84 117 TIBOR 0.78 117 TIBOR 0.79 117 TIBOR 0.79 117 TIBOR 0.79	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55	Spread -0.80	71BOR 0.80 117 118 118 118 118 118 118 118 118 118	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20 EYDR 1.55 1/17/20 EYDR 1.55	Spread -0.74
Norinchukin Bank Resona Bank Royal Bank of Scotland Shinkin Central Bank Shoko Chukin Bank Sumitomo Mitsui Banking Corp	11BOR 0.85 11TIBOR 0.85 11TIBOR 0.85 11TIBOR 0.36 11TIBOR 0.91 11TIBOR 0.90 11TIBOR 0.88 11TIBOR 0.85	EYDR 1.75 0/2/200 EYDR 1.75 0/2/200 EYDR 1.75 6/1/201 EYDR 0.26 0/2/200 EYDR 1.75	Spread -0.94	11BOR 0.88 11BOR 0.89 11BOR 0.88 11BOR 0.79 11BOR 0.86	EYDR 1.60 0/6/200 EYDR 1.60 0/7/200 EYDR 1.60 0/7/200 EYDR 1.60 0/8/200 EYDR 1.60 0/6/200 EYDR 1.60 0/8/200 EYDR 1.60	Spread	TIBOR 0.80 117 TIBOR 0.80 117 TIBOR 0.77 27 TIBOR 0.31 117 TIBOR 0.78 117 TIBOR 0.79 117 TIBOR 0.79 117 TIBOR 0.79	EYDR 1.60 1/11/20 EYDR 1.55 1/11/20 EYDR 1.55 2/8/201 EYDR 0.23 1/12/20 EYDR 1.55	Spread -0.80	11BOR 0.80 117 11BOR 0.79 117 11BOR 0.30 117 11BOR 0.80 117 11BOR 0.80 117 11BOR 0.80 117 11BOR 0.80 117 11BOR 0.81	EYDR 1.55 1/17/20 EYDR 1.55 1/14/20 EYDR 1.55 1/22/201 EYDR 0.20 1/14/20 EYDR 1.55 1/17/20 EYDR 1.55	Spread -0.74

Data Source: Bloomberg.

Note: "TIBOR" denotes the bank's 3 month EuroYen TIBOR quote for that day, and "EYDR" denotes the 3 month Yen EuroYen Deposit Rate. The spread is calculated as 3 Month EuroYen TIBOR quote minus the 3 Month EuroYen Deposit Rate. The EuroYen Deposit Rate is provided by Bloomberg and computed as an average of bid and ask prices. All figures are in percentage points.

669. Figures 31 through 49 below, measure the spread between the EYDR and each Euroyen TIBOR Contributor Panel Bank's submitted Euroyen TIBOR quote to the JBA during the period from January 2003 through June 2012. As shown in Figures 31 through 49, beginning in 2009, the Euroyen TIBOR quotes as compared to the EYDR, on average, became significantly higher, thereby causing significant increases in the Euroyen/TIBOR spread (and resulting in spreads well above the historical Euroyen/TIBOR/EYDR spreads that existed in the pre-Class Period).

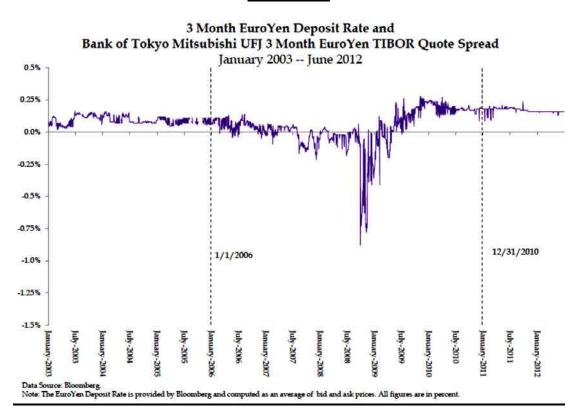
FIGURE 31

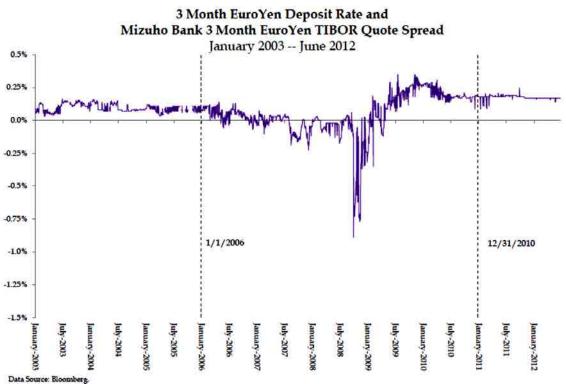
Average Spreads of Banks' EuroYen TIBOR Quotes to the EuroYen Deposit Rate

	1/3/2003 12/31/2005	1/1/2006 4/30/2009	5/1/2009 12/31/2010
Bank of Tokyo-Mitsubishi	0.0931	-0.0307	0.1681
Bank of Yokohama		-0.0994	0.1879
Chuo Mitsui Trust	0.0800	-0.0575	0.2081
<u>Citibank</u>			0.1598
<u>Deutsche Bank</u>		-0.0931	0.1906
JP Morgan Chase	0.0553	-0.0216	0.0546
Mitsubishi UFJ Trust	0.0948	-0.0220	0.1964
Mizuho Bank	0.0943	-0.0293	0.2042
Mizuho Corporate Bank	0.0950	-0.0197	0.2025
Mizuho Trust & Banking	0.0945	-0.0421	0.1686
Norinchukin Bank	0.0870	-0.0252	0.1964
Resona Bank	0.0950	-0.0218	0.2051
Royal Bank of Scotland			0.1483
Shinkin Central Bank	0.0976	-0.0127	0.2066
Shoko Chukin Bank	0.0962	-0.0270	0.1983
Sumitomo Mitsui Banking Corp	0.0948	-0.0220	0.2031
Sumitomo Trust & Banking	0.0947	-0.0237	0.1981
<u>UBS AG</u>	0.0747	-0.0121	0.1999

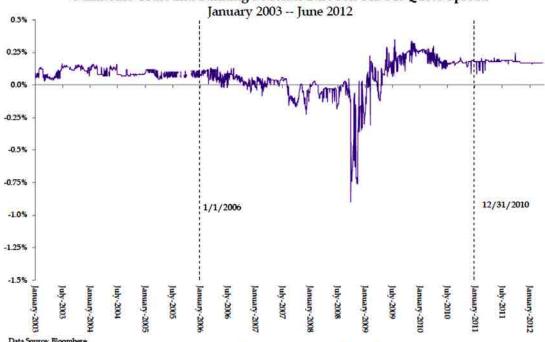
Data Source: Bloomberg.

Notes: Underlined banks overlap across LIBOR & TIBOR panels. The 3 Month EuroYen Deposit Rate is provided by Bloomberg and is the midpoint of the bid and ask quotes. All figures are in percentage points.





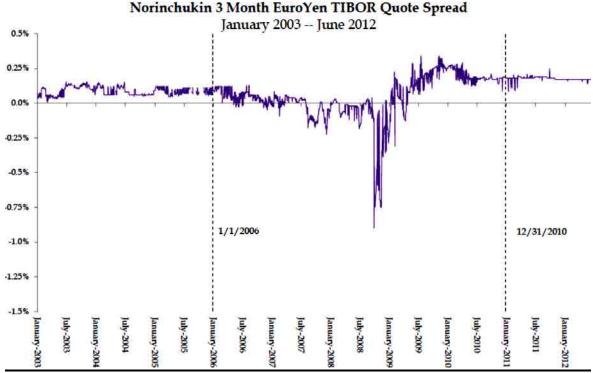
3 Month EuroYen Deposit Rate and Sumitomo Trust and Banking 3 Month EuroYen TIBOR Quote Spread

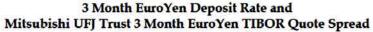


Note: The EuroYen Deposit Rate is provided by Bloomberg and computed as an average of bid and ask prices. All figures are in percent.

FIGURE 35

3 Month EuroYen Deposit Rate and nchukin 3 Month EuroYen TIBOR Quote Spread





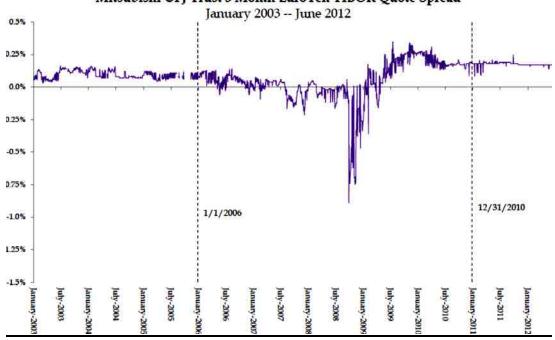


FIGURE 37

3 Month EuroYen Deposit Rate and Sumitomo Mitsui Banking Corp 3 Month EuroYen TIBOR Quote Spread

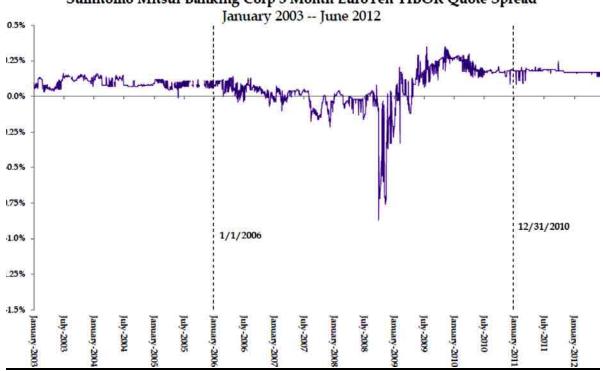
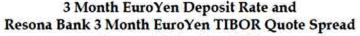
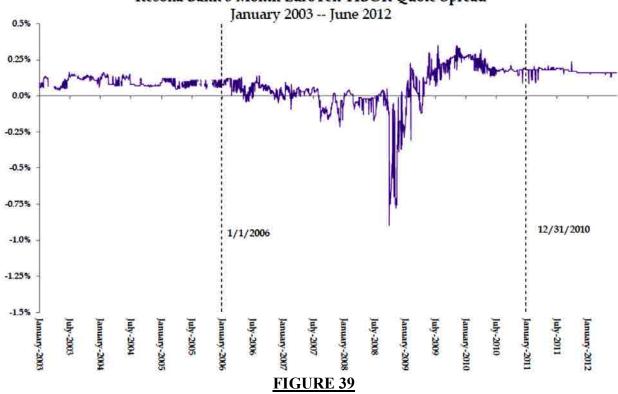


FIGURE 38





3 Month EuroYen Deposit Rate and JP Morgan Chase 3 Month EuroYen TIBOR Quote Spread

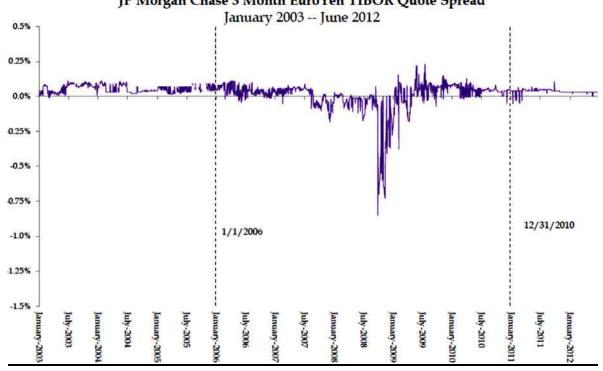
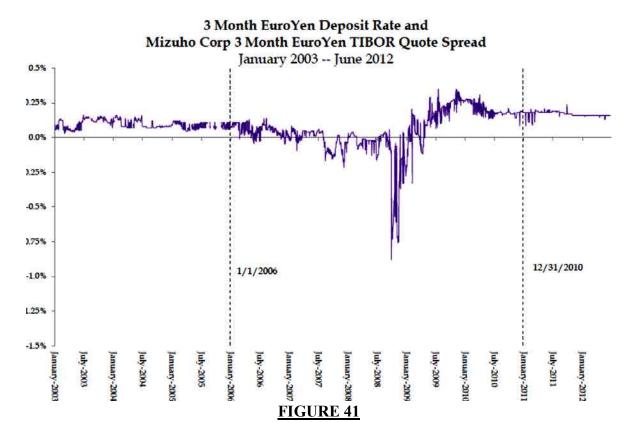


FIGURE 40



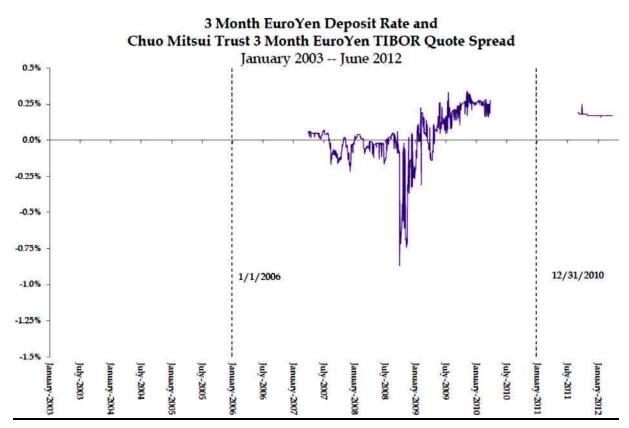


FIGURE 42

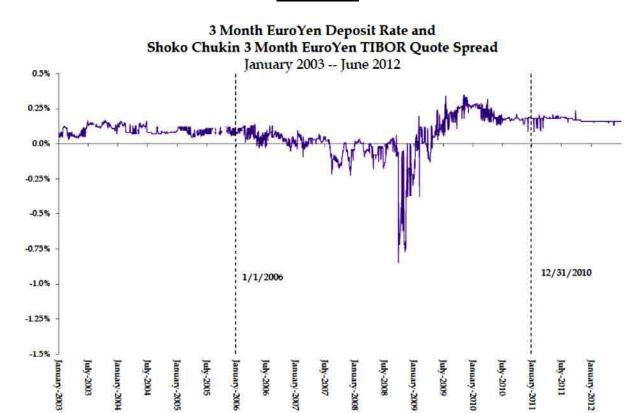


FIGURE 43

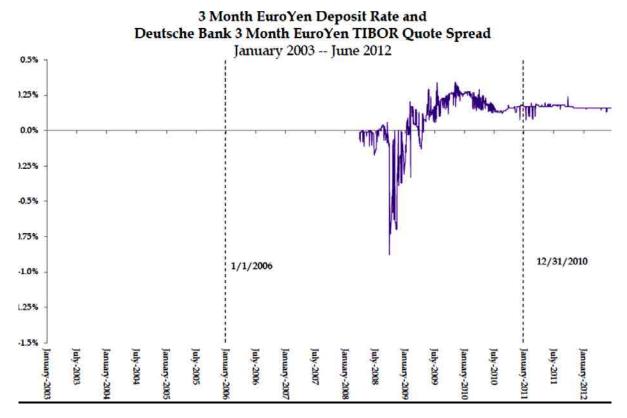
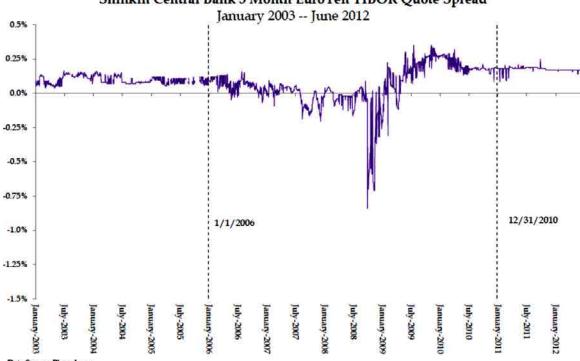


FIGURE 44
3 Month EuroYen Deposit Rate and
Shinkin Central Bank 3 Month EuroYen TIBOR Quote Spread



Data Source: Bloomberg.

Note: The EuroYen Deposit Rate is provided by Bloomberg and computed as an average of bid and ask prices. All figures are in percent.

FIGURE 45

3 Month EuroYen Deposit Rate and UBS AG 3 Month EuroYen TIBOR Quote Spread

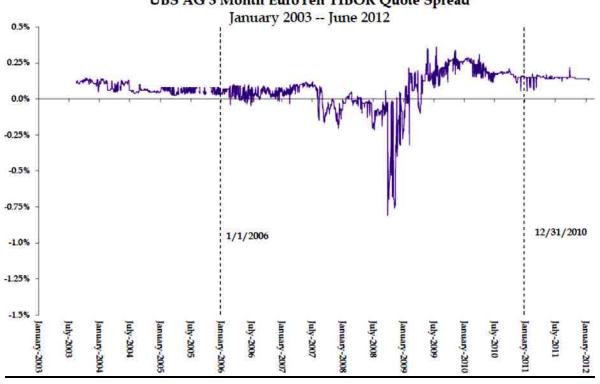


FIGURE 46



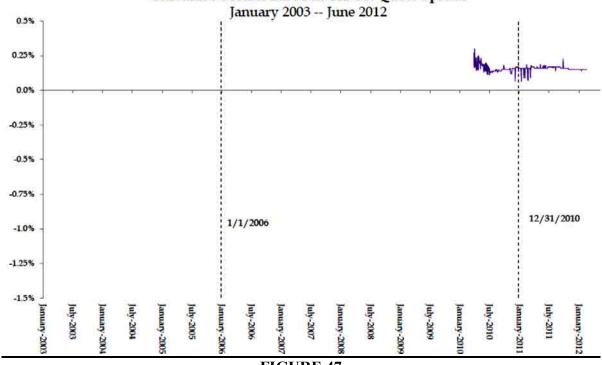
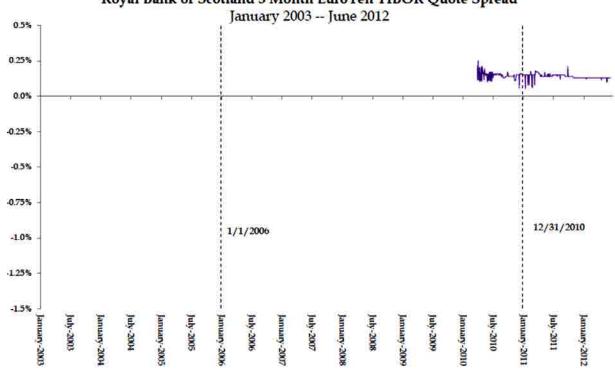
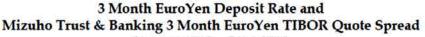


FIGURE 47

3 Month EuroYen Deposit Rate and Royal Bank of Scotland 3 Month EuroYen TIBOR Quote Spread





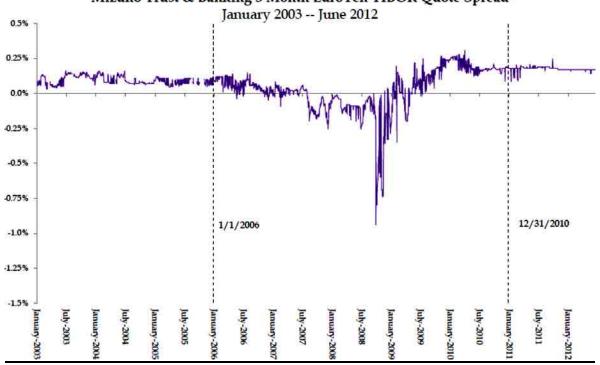
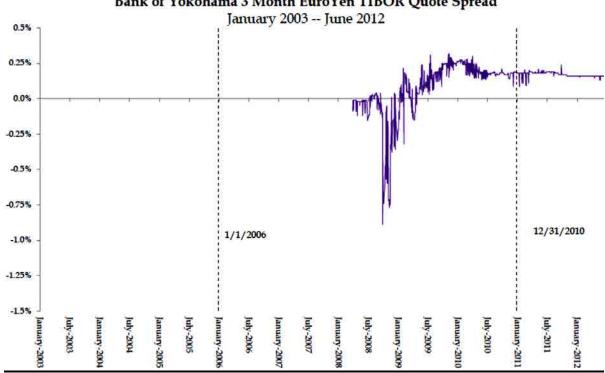


FIGURE 49

3 Month EuroYen Deposit Rate and Bank of Yokohama 3 Month EuroYen TIBOR Quote Spread



2. Yen-LIBOR

- 670. Figure 50 below presents examples of quotes submitted by Defendant Yen-LIBOR panel banks that were significantly lower than the prevailing EYDR, often by 75 basis points, and on certain instances more than 100 basis points (or a full percentage point) below the the-then prevailing EYDR, further supporting Yen-LIBOR artificiality during the Class Period.
- 671. For example, as illustrated in Figure 50, below, on October 8, 2008, Defendants Bank of Tokyo Mitsubishi, Sumitomo Mitsui Banking Corp. and Norinchukin Bank submitted Yen-LIBOR quotes of 0.98, 0.99, and 0.97, which were respectively lower than the prevailing EYDR of 2.00 by -1.02, -1.01, and -1.03. On November 17, 2008, Defendants JPMorgan Chase, Deutsche, and UBS all submitted a Yen-LIBOR quote of 0.85, three of the banks named in the Canadian Competition Bureau's Euroyen manipulation investigation, lower than the prevailing EYDR of 1.80 by -0.95. Each of the foregoing rate submissions resulted in negative spreads which diverged materially from the historical, pre-Class Period average positive spread of 0.0480 between Yen-LIBOR and the EYDR.

FIGURE 50

3 Month Yen LIBOR Quotes, EuroYen Deposit Rate (ask) and Associated Spread for Each Bank on Selected Days

	10/8/2008		10/10/2008		10/14/2008				11/17/2008			
	LIBOR		Spread	LIBOR		Spread	LIBOR		Spread	LIBOR		Spread
Bank of Tokyo-Mitsubishi	0.98	2.00	-1.02	1.02	1.90	-0.88	1.02	1.80	-0.78	0.88	1.80	-0.92
	10/10/2008		10/14/2008		11/14/2008			11/17/2008				
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
Barclays	1.25	1.90	-0.65	1.35	1.80	-0.45	1.14	1.80	-0.66	1.16	1.80	-0.64
		10/10/200	8		11/11/200	8		11/14/200	8		11/17/200	3
	LIBOR		Spread	LIBOR		Spread	LIBOR	EY(Ask)	Spread	LIBOR		Spread
Citibank	1.15	1.90	-0.75	0.88	1.80	-0.92	0.89	1.80	-0.91	0.90	1.80	-0.90
		10/10/200	8		10/14/200	8	15	11/14/200	8		11/17/200	3
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread		EY(Ask)	Spread
Deutsche Bank	1.03	1.90	-0.87	1.00	1.80	-0.80	0.85	1.80	-0.95	0.85	1.80	-0.95
		10/10/200	8		10/14/200	8		10/15/200	8		10/16/200	3
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
HSBC	1.14	1.90	-0.76	1.13	1.80	-0.67	1.12	1.80	-0.68	1.10	1.70	-0.60
		11/12/200	8		11/13/200	8	1	11/14/200	8		11/17/200	8
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
JP Morgan Chase	0.86	1.80	-0.94	0.86	1.70	-0.84	0.85	1.80	-0.95	0.85	1.80	-0.95
		11/12/2008		11/13/2008		-	11/14/200	8	11/17/2008			
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
Lloyds Banking Group	0.90	1.80	-0.90	0.90	1.70	-0.80	0.91	1.80	-0.89	0.90	1.80	-0.90
	10/10/2008		10/14/2008		11/14/2008			11/17/2008				
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
Mizuho Corporate Bank	1.07	1.90	-0.83	1.07	1.80	-0.73	0.88	1.80	-0.92	0.88	1.80	-0.92
		10/8/2008	É		10/10/200	8		10/14/200	8		11/17/200	3
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
Norinchukin Bank	0.97	2.00	-1.03	0.99	1.90	-0.91	0.99	1.80	-0.81	0.87	1.80	-0.93
		10/10/200	8		10/14/200	8		10/16/200	8		10/17/200	
	LIBOR	and the second second	Spread	LIBOR	1000000	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
Rabobank	0.80	1.90	-1.10	0.80	1.80	-1.00	0.80	1.70	-0.90	0.80	1.70	-0.90
		10/10/200	8		10/14/200	8		11/14/200	8		11/17/200	8
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
Royal Bank of Scotland	1.08	1.90	-0.82	1.06	1.80	-0.74	0.86	1.80	-0.94	0.86	1.80	-0.94
		10/8/2008		10/9/2008		10/14/2008			10/15/2008		8	
	LIBOR	EY(Ask)	Spread	LIBOR		Spread	LIBOR	EY(Ask)	Spread	LIBOR		Spread
Societe Generale	1.25	2.00	-0.75	1.25	2.00	-0.75	1.20	1.80	-0.60	1.20	1.80	-0.60
		10/8/2008			10/9/2008			10/10/200			10/14/200	8
	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
Sumitomo Mitsui Banking Corp	0.99	2.00	-1.01	0.99	2.00	-1.01	1.02	1.90	-0.88	1.02	1.90	-0.78
		10/10/200			10/14/200			11/14/200			11/17/200	
	LIBOR		Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread	LIBOR	EY(Ask)	Spread
UBS AG	1.03	1.90	-0.87	1.03	1.80	-0.77	0.85	1.80	-0.95	0.85	1.80	-0.95

Data Source: Bloomberg

Note: "LIBOR" denotes the bank's 3 month Yen LIBOR quote for that day, and "EY(ask)" denotes the 3 month Yen EuroYen Deposit Rate ask. The spread is calculated as 3 Month Yen LIBOR quote minus ask price of the 3 Month EuroYen Deposit Rate. The ask price of the EuroYen Deposit Rate is provided by Bloomberg. All figures are in percentage points.

672. Figures 51 through 65 below, measure the spread between the EYDR and each Yen-LIBOR Defendant panel bank's submitted Yen-LIBOR quote to the BBA during the period from January 2003 through June 2012.

Average Spreads of Banks' Yen LIBOR Quotes to the EuroYen Deposit Rate (Ask Quote)

	1/3/2003 — 12/31/2005	1/1/2006 4/30/2009	5/1/2009 — 12/31/2010
Bank of Tokyo-Mitsubishi	0.0556	-0.0502	-0.0046
Barclays	0.0427	-0.0014	-0.0155
Citibank	0.0487	-0.0345	-0.0071
Deutsche Bank	0.0482	-0.0526	-0.0407
HSBC	0.0546	-0.0254	-0.0125
JP Morgan Chase	0.0370	-0.0428	-0.0146
Lloyds Banking Group	0.0158	-0.0284	-0.0079
Mizuho Corporate Bank	0.0655	-0.0349	-0.0032
Norinchukin Bank	0.0732	-0.0422	-0.0034
Rabobank	0.0365	-0.0378	-0.0346
Royal Bank of Scotland	-0.0046	-0.0504	-0.0152
Societe Generale	0.0384	-0.0053	-0.0186
Sumitomo Mitsui Banking Corp	0.0642	-0.0416	-0.0031
UBS AG	0.0429	-0.0514	-0.0151

Data Source: Bloomberg.

Notes: Underlined banks overlap across LIBOR & TIBOR panels. The 3 Month EuroYen Deposit Rate ask quote is provided by Bloomberg. All figures are in percentage points.

FIGURE 52

3 Month EuroYen Deposit Rate Ask Price and Bank of Tokyo Mitsubishi UFJ 3 Month Yen LIBOR Quote Spread

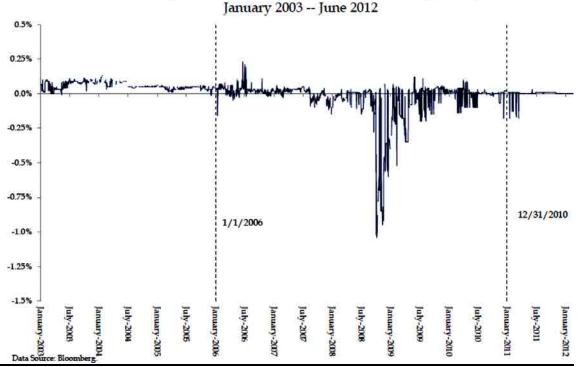


FIGURE 53

3 Month EuroYen Deposit Rate Ask Price and Deutsche Bank 3 Month Yen LIBOR Quote Spread

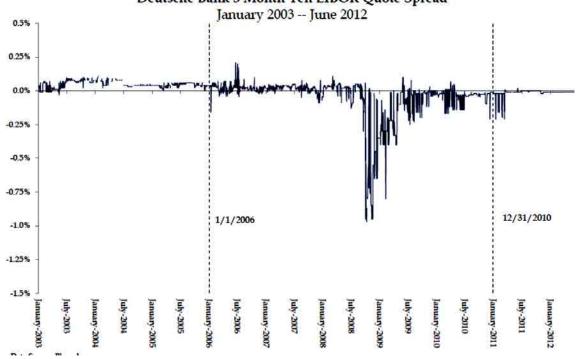
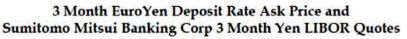
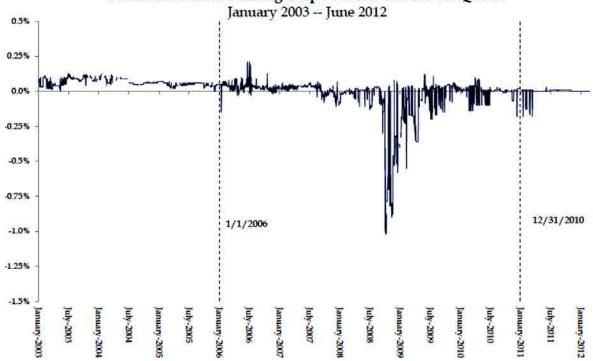


FIGURE 54





3 Month EuroYen Deposit Rate Ask Price and Barclays 3 Month Yen LIBOR Quote Spread

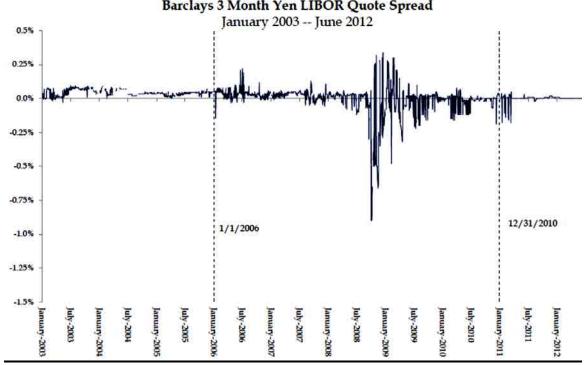
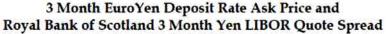


FIGURE 56



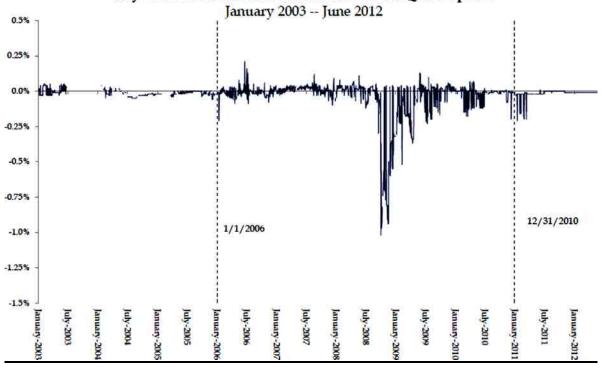


FIGURE 57

3 Month EuroYen Deposit Rate Ask Price and Societe Generale 3 Month Yen LIBOR Quote Spread

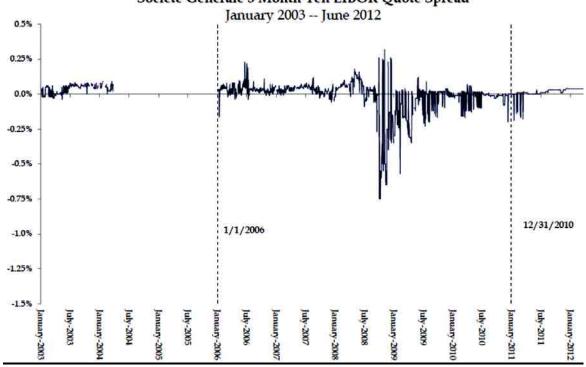
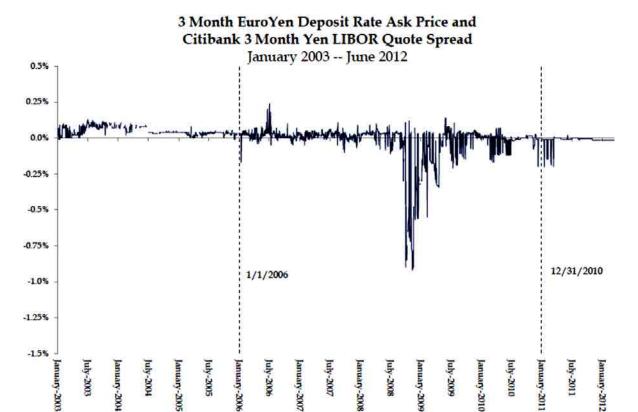


FIGURE 58



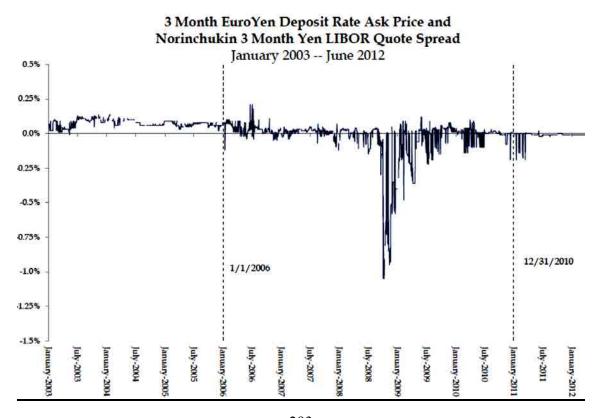
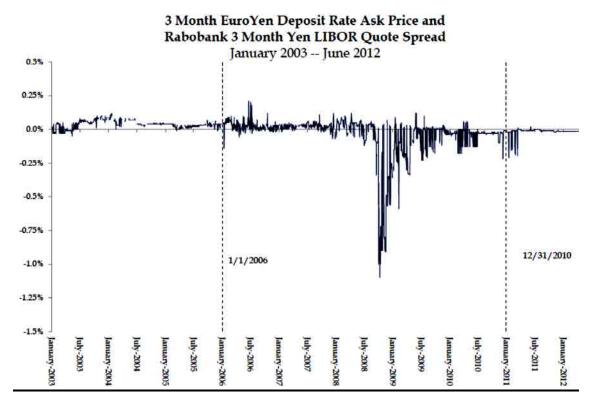
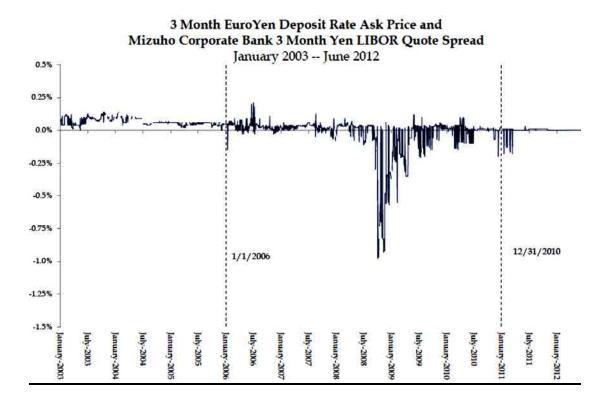
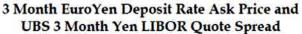
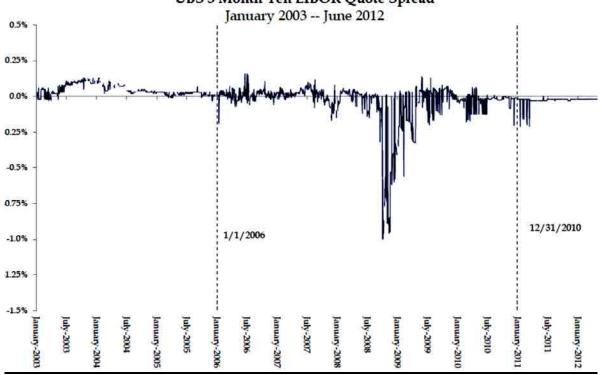


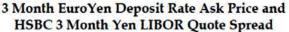
FIGURE 60

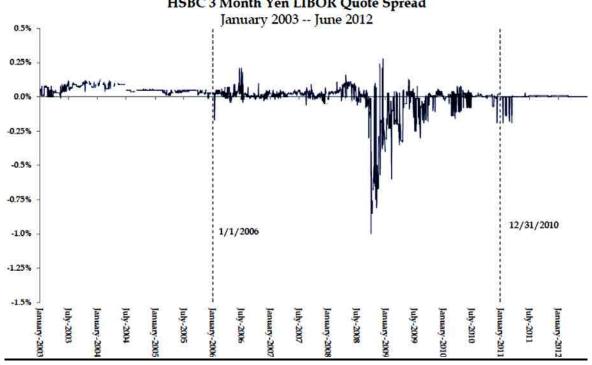












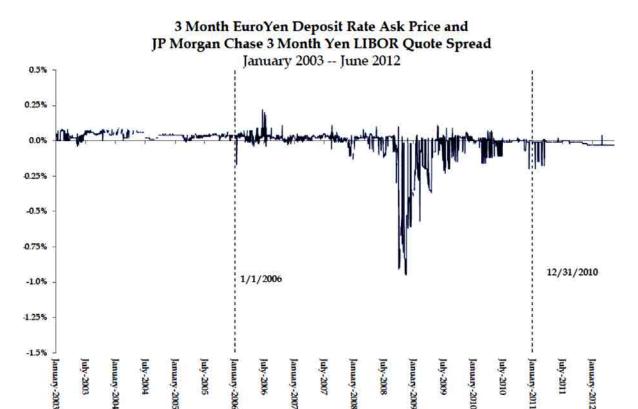


FIGURE 65

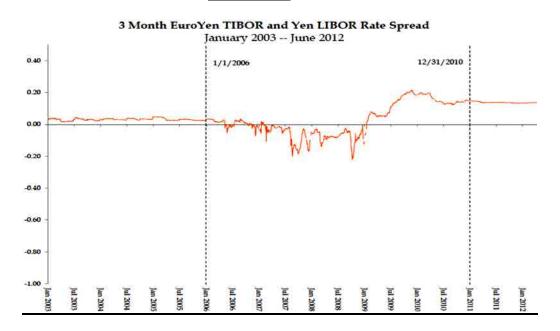


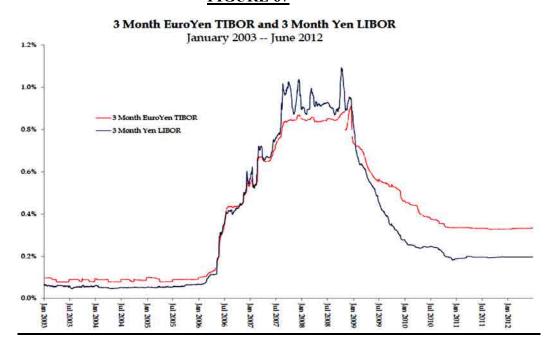
C. <u>During the Class Period, Euroyen TIBOR and Yen-LIBOR Diverged</u> Dramatically From their Historical Relationship with Each Other

- 673. Figures 66 and 67 below shows the relationship between Euroyen TIBOR and Yen-LIBOR beginning in January 2003 and ending in June 2012. As demonstrated therein, historically before the start of the Class Period, between January 2003 and December 2005, Euroyen TIBOR and Yen-LIBOR moved closely together with Euroyen TIBOR remaining slightly higher than Yen-LIBOR, causing the Euroyen TIBOR/Yen-LIBOR spread to be slightly positive. In particular, during the 36-month period of January 2003 to December 2005, the average spread of Euroyen TIBOR with respect Yen-LIBOR was a positive 0.024.
- 674. By the start of the Class Period, this historical relationship began to diverge, as Yen-LIBOR increases at a faster rate than Euroyen TIBOR thereby causing a collapse and eventual inversion of the spread between Euroyen TIBOR and Yen-LIBOR (*i.e.*, the spread turns negative as Euroyen TIBOR becomes higher than Yen-LIBOR). During the period of January 1, 2006 through January 15, 2009, the average spread between Euroyen TIBOR and Yen-LIBOR was -0.043. Following January 15, 2009, and continuing through to the end of the Class Period, the relationship between Euroyen TIBOR and Yen-LIBOR remained delinked from its pre-Class Period historical relationship. For example, from January 16, 2009 through the end of the Class Period the average spread was positive 0.137, far from its historical pre-Class Period average of 0.024 by more than 470%. Further, on November 26, 2009, the Euroyen TIBOR/Yen-LIBOR spread reached as high as 0.216, and on January 27, 2010, it reached as high as 0.200.
- 675. As explained above, important market and financial fundamentals, such as day-to-day changes in monetary policy, market risk and interest rates, as well as risk factors facing the Defendant banks should (absent manipulation) be reflected similarly in Euroyen TIBOR and Yen-LIBOR, and therefore not cause the historical relationship between these rates to diverge.

Significant de-linkages in the historical relationship between Euroyen TIBOR and Yen-LIBOR during the Class Period strongly indicate that Euroyen TIBOR and Yen-LIBOR rates were artificial.

FIGURE 66



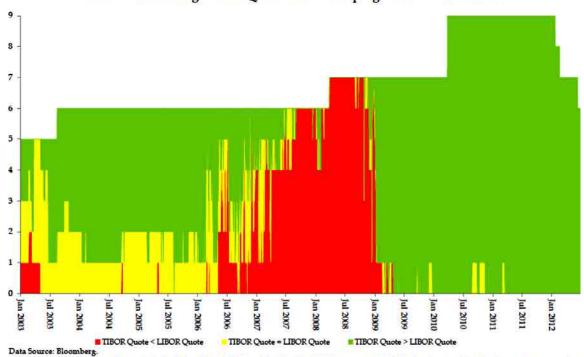


D. The Defendant Banks That Served on Both Panels Submitted Lower Individual Euroyen TIBOR Quotes than Yen-LIBOR

- 676. As explained in ¶¶ 673-675, and Figures 66 and 67 above, the historical pre-Class Period relationship between Euroyen TIBOR and Yen-LIBOR was such that Euroyen TIBOR was slightly higher than Yen-LIBOR.
- 677. As detailed in Figures 68 and 69, the Defendant panel banks that served on both the Euroyen TIBOR and Yen-LIBOR panels repeatedly submitted a <u>lower</u> Euroyen TIBOR quote than Yen-LIBOR quote during the Class Period, which is contrary to the historical pre-Class Period relationship between Euroyen TIBOR and Yen-LIBOR, and the overlapping banks' pre-Class Period conduct. The foregoing further supports that Euroyen TIBOR was artificial during the Class Period.

FIGURE 68

Number of Contributing TIBOR Quotes Greater-Than, Equal-To, and Less-Than Contributing LIBOR Quotes for Overlaping Banks Across Panels



Notes: Only banks that contribute to both the 3 Month Yen LIBOR and the EuroYen TIBOR are represented. The height of each bar displays, on any given day, the number of banks that either submitted (1) TIBOR quotes that were greater than their corresponding LIBOR quotes, (2) TIBOR quotes that were equal to their corresponding LIBOR quotes, or (3) TIBOR quotes that were less than their corresponding LIBOR quotes.

678. As demonstrated in Figure 69 below, Defendants Bank of Tokyo-Mitsubishi, Mitsui Sumitomo Banking Corp., Mizuho Corporate Bank, Norinchukin Bank and JPMorgan Chase, submitted a lower Euroyen TIBOR quote than their Yen-LIBOR quote almost 50% of the time during the Class Period.

FIGURE 69

Comparison of Banks' 3 Month EuroYen TIBOR Quotes against Contributing Banks' 3 Month EuroYen LIBOR Quotes

	1/1/2003		1/1/20	06
_	12/31/	2005	12/31/2010	
_				
	TIBOR q	uote <	TIBOR q	uote <
	LIBOR	quote	LIBOR	quote
Bank of Tokyo-Mitsubishi	0		549	(46%)
Citibank	0		0	
Deutsche Bank	0		156	(24%)
JP Morgan Chase	99	(14%)	514	(43%)
Mizuho Corporate Bank	15	(2%)	529	(44%)
Norinchukin Bank	1	(0%)	532	(45%)
Royal Bank of Scotland	0		0	
Sumitomo Mitsui Banking Corp	1	(0%)	541	(45%)
UBS AG	2	(0%)	348	(29%)

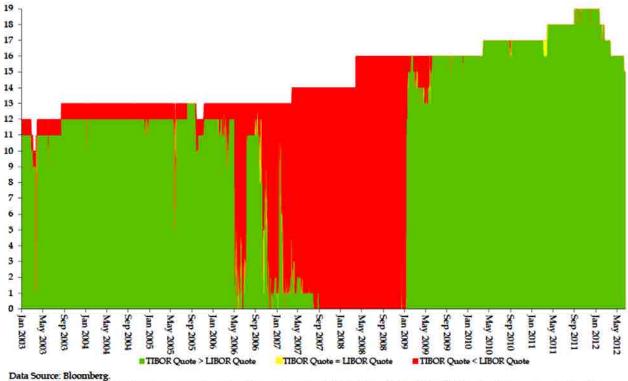
Data Source: Bloomberg.

Notes: Banks overlap across LIBOR & TIBOR panels.

679. Figure 70 below performs a similar analysis, but does not limit its sample to just overlapping Euroyen TIBOR and Yen-LIBOR banks. Instead, Figures 70 and 71 measure all individual Euroyen TIBOR quotes for all reporting Euroyen TIBOR panel banks and compares it to the <u>actual</u> Yen-LIBOR fix.

- 680. In Figure 70, the height of each bar displays, on any given day, the number of banks that either submitted (1) Euroyen TIBOR quotes that were greater than the Yen-LIBOR fix (green); (2) Euroyen TIBOR quotes that were equal to the Yen-LIBOR fix (yellow); or (3) Euroyen TIBOR quotes that were less than the Yen-LIBOR fix (red).
- 681. Figure 70 demonstrates that during the Class Period, from approximately January 2007 through January 2009, on average, 93% of Euroyen TIBOR quotes submitted by Defendant panel banks on the Euroyen TIBOR panel were lower than the actual daily Yen-LIBOR fix. In fact, from September 2007 through January 2009, virtually all of the Euroyen TIBOR Contributor Panel Banks submitted an individual Euroyen TIBOR quote which was lower than the actual Yen-LIBOR fix, day in and day out.

FIGURE 70
Number of Contributing 3 Month EuroYen TIBOR Quotes Greater-Than,
Equal-To, and Less-Than 3 Month Yen LIBOR



Notes: The height of each bar displays, on any given day, the number of banks that either submitted (1) TIBOR quotes that were greater than the LIBOR, (2) TIBOR quotes that were equal to the LIBOR, or (3) TIBOR quotes that were less than the LIBOR.

Comparison of Banks' 3 Month EuroYen TIBOR quotes against Actual 3 Month Yen LIBOR

	1/1/20	003	1/1/20	006
	12/31/	2005	12/31/	2010
	TIBOR < Act	tual LIBOI	R TIBOR < Act	ual LIBOR
Bank of Tokyo-Mitsubishi	0		609	(51%)
Bank of Yokohama	0		190	(29%)
Chuo Mitsui Trust	0		418	(58%)
<u>Citibank</u>	0		0	
<u>Deutsche Bank</u>	0		190	(29%)
JP Morgan Chase	625	(88%)	633	(53%)
Mitsubishi UFJ Trust	0		540	(45%)
Mizuho Bank	0		593	(50%)
<u> Mizuho Corporate Bank</u>	0		543	(45%)
Mizuho Trust & Banking	0		578	(48%)
<u>Norinchukin Bank</u>	0		580	(49%)
Resona Bank	0		545	(46%)
Royal Bank of Scotland	0		0	
Shinkin Central Bank	0		523	(44%)
Shoko Chukin Bank	0		546	(46%)
Sumitomo Mitsui Banking Corp	1	(0%)	544	(46%)
Sumitomo Trust & Banking	0		543	(45%)
UBS AG	66	(12%)	496	(42%)

Data Source: Bloomberg; CMA

Notes: Underlined banks overlap across LIBOR & TIBOR panels. The 3 Month EuroYen

Deposit Rate is provided by Bloomberg.

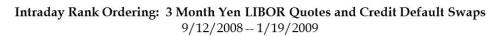
Percentages are computed with respect to each respective bank's total number of TIBOR quotes in each given period.

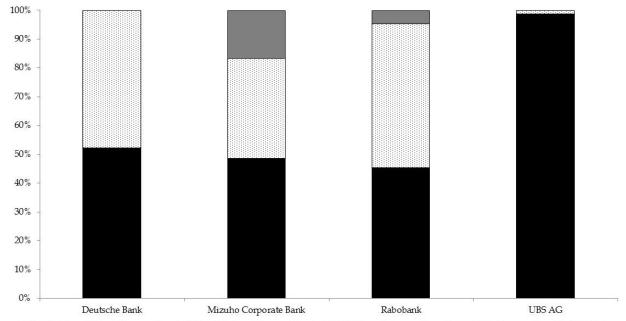
E. The Difference Between Defendants' Reported Yen-LIBOR Quotes and their CDS Spreads Strongly Supports Yen-LIBOR Artificiality

- 682. Another economic indicator that Yen-LIBOR was artificial during the Class Period is the difference between the Yen-LIBOR Defendant panel banks' reported daily Yen-LIBOR quotes and the contemporaneous cost of buying default insurance, known as the "spread," on credit-default swaps ("CDS") that Yen-LIBOR Defendant panel banks issued during the Class Period.
- 683. A CDS is a contract which transfers credit risk from a credit protection buyer to a credit protection seller. This agreement occurs when one party, the protection buyer, seeks financial protection in event of a default on an underlying credit instrument, such as a bond or a loan. Generally, a CDS buyer makes a series of payments (known as the CDS "fee" or "spread") to the CDS seller in exchange for a payment if the underlying credit instrument experiences an adverse credit event.
- 684. The spread serves as a measure of the perceived risk of default by the entity issuing the underlying bond or receiving the loan. Typically, the greater the risk of default the underlying bond or loan bears, the higher the CDS spread. In the case of a CDS for which the underlying instrument consists of an interbank loan where a Yen-LIBOR panel bank is the borrower, the greater the perceived risk the panel bank will default on the loan, the higher the applicable CDS spread, as this higher spread represents the cost of insuring against the increased risk of a default on the underlying loan.
- 685. It is expected that an individual Yen-LIBOR bank's daily quote and its CDS spreads should move in relative lockstep, meaning that when an individual bank has a CDS spread that is one of the lowest when compared to all other banks in the group, it should also have one of the lowest LIBOR quotes in the group. Plaintiffs' economic analyses indicate that

this was not the case during the Class Period, and in particular from September 12, 2008 through January 19, 2009, when banks with the highest CDS spreads in the Yen-LIBOR panel very often (nearly 100% of the time) submitted the lowest Yen-LIBOR quotes.

- 686. Plaintiffs analyzed available CDS spread data for select Yen-LIBOR panel banks.
- on each given day, Yen-LIBOR quotes submitted by Yen-LIBOR panel bank. Defendants were ranked (ordered) from highest to lowest. The quotes were then classified into two groups: above or equal, and below the median Yen-LIBOR quote for that day, among the same group of banks. Similar rank ordering was performed for CDS spreads for the same group of banks, and the CDS spreads were classified into two groups:, above or equal, and below the median CDS spread on that day, within the same group of banks. For each bank, results were organized into the three following groups: (i) Yen-LIBOR Quote Below Median & CDS Above or Equal Median (Black); (ii) Yen-LIBOR Quote Below Median & CDS Above or Equal Median together with Yen-LIBOR Quote Below Median & CDS Below Median (Dotted); and (iii) Yen-LIBOR Quote Above or Equal Median (Gray).
- 688. Among other findings, Figure 72 shows that from September 12, 2008 through January 19, 2009, Defendant UBS's Yen-LIBOR quotes were below its CDS spread almost 100% of the time, and that the Yen-LIBOR quotes submitted by Defendants Deutsche Bank, Mizuho Corporate Bank, and Rabobank were below their respective CDS spreads 50% (or nearly 50%) of the time.





■ LIBOR Below & CDS Above or Equal □ LIBOR Below (Above or Equal) & CDS Below (Above or Equal) □ LIBOR Above or Equal & CDS Below Data Source: LIBOR data from Bloomberg; Credit Default Swap (CDS) data from CMA, starting on 9/12/2008.

Notes: Intraday ordering of 3 Month Yen LIBOR quotes and respective CDS Spreads. On each given day, banks LIBOR quotes are orderedfrom highest to lowest, and classified into two groups: above or equal, and below the median LIBOR quote for that day, among the same group of banks. Similar ordering is performed for the available CDS spreads for the same group of banks conditional on data availability, classifying them into above or equal and below the median CDS spread on that day, within the same group. For each bank, results are organized in three groups: LIBOR Quote Below Median & CDS Above or Equal Median (black), LIBOR Quote Aboveor Equal Median & CDS Above or Equal Median together with LIBOR Quote Below Median & CDS Below Median (dotted), and LIBOR Quote Above or Equal Median & CDS Below Median (gray). The CDS data used are for the banks' one year senior debt CDS contracts in USD.

689. Figure 73 below illustrates additional examples of when Yen-LIBOR Defendant banks submitted Yen-LIBOR quotes well below their then-prevailing CDS spreads. For example, on October 15 2008, Deutsche Bank submitted the lowest Yen-LIBOR quote, yet its CDS spread was the 9th lowest amongst 12 CDS spreads for that day. This means that Deutsche Bank had one of the highest CDS spreads among the Yen-LIBOR panel banks on that day, while having the lowest Yen-LIBOR quote. UBS is one of the banks with the largest difference between its CDS spreads and Yen-LIBOR quotes. For example, on September 16, 25, 26 and 29 of 2008, UBS submitted the lowest Yen-LIBOR quote yet it had the highest CDS spread among 12 CDS spreads for that day.

FIGURE 73

Intraday Rank Ordering of LIBOR Quotes and Credit Default Swaps

	10/15/2008		10/22,	/2008	10/23/2008		10/24/2008		
	LIBOR Rank	CDS Rank	LIBOR Rank	CDS Rank	LIBOR Rank	CDS Rank	LIBOR Ran	k CDS Rank	
Deutsche Bank	1	9	2	11	2	11	2	11	
	10/8/2008		10/15/2008		10/28/2008		11/4/2008		
	LIBOR Rank	CDS Rank	LIBOR Rank	CDS Rank	LIBOR Rank	CDS Rank	LIBOR Ran	k CDS Rank	
Mizuho Corporate Bank	3	10	5	11	1	8	4	10	
	10/10/	2008	10/13/2008		10/14/2008		12/16/2008		
	LIBOR Rank	CDS Rank	LIBOR Rank	CDS Rank	LIBOR Rank	CDS Rank	LIBOR Ran	k CDS Rank	
Rabobank	1	8	1	9	1	9	2	10	
	9/16/2008		9/25/2008		9/26/2	2008	9/29/2008		
	LIBOR Rank	CDS Rank	LIBOR Rank	CDS Rank	LIBOR Rank	CDS Rank	LIBOR Ran	k CDS Rank	
UBS AG	1	12	1	12	1	12	1	12	

Data Source: Bloomberg; CDS data from CMA.

Note: The rank is from lowest to highest, *i.e.*, a rank of 1 for LIBOR means that the bank had the lowest quote submitted that day. Similarly, a rank of 9 for CDS means that the bank had the ninth lowest CDS subnitted that day. On each given day there were an average of 12 to 13 banks contributing to the LIBOR panel for which CDS data were available.

IX. <u>During The Class Period, Plaintiffs Transacted in Euroyen-Based Derivatives at Artificial Prices Proximately Resulting From Defendants' Manipulation and False Reporting of Euroyen TIBOR and Yen-LIBOR</u>

A. Plaintiff Sonterra

- 690. Plaintiff Sonterra entered into U.S.-based transactions for Euroyen-based derivatives during the Class Period, including Yen foreign exchange forwards, at artificial prices proximately caused by Defendants' manipulative conduct and suffered legal injury. For example, on May 20, 2010, Sonterra entered into a Yen foreign exchange forward, agreeing to buy \$2,111,434.86 for ¥190,000,000.00 on May 28, 2010.
- 691. Communications released as part of RBS' settlement with the CFTC demonstrates that Defendants were involved in manipulating six-month Yen-LIBOR on May 20, 2010:

May 20, 2010:

[RBS] Senior Yen Trader: [Yen Trader 1/Yen Trader 6] can ask [Primary Submitter] to bump up 6m JPY libor by 1bp

[RBS] Yen Trader 1:sure[RBS] Senior Yen Trader:tx[RBS] Yen Trader 6:yes

App. at 147, ¶ 347.

692. As alleged in ¶¶ 132-33 and acknowledged by both RBS⁸⁷ and Rabobank⁸⁸ in their settlements with the CFTC Yen foreign exchange forwards are one of several Euroyen-based derivatives that are priced "based on" or "off of" Yen-LIBOR using an industry standard formula. Defendants' upward manipulation of Yen-LIBOR on May 20, 2010, artificially increased the "Rterm" component in formula used to determine the price of purchasing U.S. Dollars in terms of Yen, increasing the amount of Yen Sonterra was required to pay under its foreign exchange forward. As a result, Sonterra was injured when it entered into a Yen foreign exchange forward at an artificially higher price on May 20, 2010.

B. Plaintiff Hayman

693. Plaintiff Hayman entered into U.S.-based transactions for Euroyen-based derivatives during the Class Period, including Yen-LIBOR-based interest rate swaps and Yen-LIBOR-based swaptions, directly with Defendants Barclays, Merrill Lynch, JPMorgan, and Deutsche Bank at artificial prices directly and proximately caused by Defendants' manipulative conduct. For example, on July 15, 2009, Hayman enter into a Yen-LIBOR-based interest rate swap with Merrill Lynch, agreeing to pay 1.515% interest on ¥2,500,000,000, in exchange for receiving floating rate payments based on Yen-LIBOR, starting on August 15, 2009.

⁸⁷ Ex. B-4 at 6 (explaining Yen foreign exchange forwards are "priced based on" Yen-LIBOR).

⁸⁸ Ex. D-2 at 6 (explaining Yen foreign exchange forwards are "priced off of" Yen-LIBOR).

694. Communications released as part of Defendant UBS' settlements with the CFTC and FCA demonstrate that Defendants were engaged in a coordinated manipulation of one-month, three-month, and six-month Yen-LIBOR on July 15, 2009:

July 15, 2009:

<u>Derivatives Broker C/D 1</u>: ha ha ok mate i can see you as captain chaos cash still

looking a touch easier but nothing much going on arbi are starting to produce bids so hopefully the offers may go

back

[UBS] Senior Yen Trader [Tom Hayes]: ok i only need 6m high this month then you

MUST get it lower a lot lower pls keep 3m and

1m unch.

Derivatives Broker C/D 1: "ok ..."

App. at 133, ¶ 312.

695. As a result, Hayman suffered legal injury when it agreed to enter into a Yen-LIBOR-based interest rate swap with Merrill Lynch on July 15, 2009, at an artificial price directly and proximately caused by Defendants' manipulation of Yen-LIBOR.

- 696. Similarly, on September 7, 2009, Hayman entered into two Yen-LIBOR-based interest rate swaps, one with Defendant JPMorgan agreeing to pay 1.60875% on ¥4,400,000,000 and another with Defendant Merrill Lynch, agreeing to pay 1.59875% on ¥4,400,000,000, in exchange for receiving floating rate payments based on Yen-LIBOR, starting on September 7, 2010.
- 697. Communications released as part of Defendant Deutsche Bank's settlement with the DOJ, Defendant UBS' settlement with the CFTC, and Broker Defendant ICAP's settlement with the CFTC demonstrate that these transactions occurred while Defendants were engaged in a

concerted effort to manipulate three-month and six-month Yen-LIBOR lower during August and September 2009:

August 11, 2009:

[Deutsche Bank] Trader-11 [Guillaume Adolph] explained some of his earlier plans concerning the six month Yen LIBOR to Trader K-2, a trader at Firm K, noting

"between u and me 6m libor is going to go very low in sep" and "[Hayes] will drop and teh others when back from holiday."

App. at 139, ¶ 324.

September 10, 2009:

[ICAP] Derivatives Broker 1

[Darrell Read]: Happy friday mate ... libors still heading in the right

direction.

<u>UBS Yen Trader 2</u>: good mng Monday is the d-day

[ICAP] Derivatives Broker 1

[Darrell Read]: big fix?

<u>UBS Yen Trader 2</u>: Yeah both 3s and 6s

[ICAP] Derivatives Broker 1

[Darrell Read]: low in both?

<u>UBS Yen Trader 2</u>: ye

[ICAP] Derivatives Broker 1

[Darrell Read]: ok will call [Cash Broker 1 [Colin Goodman]] on the train

into work [UBS Yen Trader 2], you realise that you have the ability to influence the 3m fix, you are currently sitting at the upper end of the range. The 6m will have to

come down to others as you are already v low.

<u>UBS Yen Trader 1</u>: yep

[ICAP] Derivatives Broker 1

[Darrell Read]: ill remind you to chase your cash boys as well:-)

<u>UBS Yen Trader 1</u>: cool:-) on monday

[ICAP] Derivative Broker 1

[Darrell Read]: yes

App. at 139-140, ¶ 327.

- 698. As a result, Hayman suffered legal injury when it agreed to enter into Yen-LIBOR based interest rate swaps with Merrill Lynch and JPMorgan on September 7, 2009, at artificial prices directly and proximately caused by Defendants' manipulation of Yen-LIBOR.
- 699. Defendants' manipulation of Yen-LIBOR and Euroyen TIBOR also directly impacted Hayman's Yen-LIBOR based swaption transactions. For example, on March 3, 2010, Hayman sold four Yen-LIBOR based payer swaptions: (1) giving JPMorgan the right to enter into an interest rate swap where Hayman would pay 2.32% interest on ¥1,000,000,000 in exchange for receiving floating rate payments based on Yen-LIBOR; (2) giving JPMorgan the right to enter into an interest rate swap where Hayman would pay 2.415% interest on ¥1,000,000,000 in exchange for receiving floating rate payments based on Yen-LIBOR; (3) giving Merrill Lynch the right to enter into an interest rate swap where Hayman would pay 1.59875% interest on ¥4,400,000,000 in exchange for receiving floating rate payments based on Yen-LIBOR; and (4) giving JPMorgan the right to enter into an interest rate swap where Hayman would pay 1.60875% interest on ¥4,400,000,000 in exchange for receiving floating rate payments based on Yen-LIBOR.
- 700. Communications released as part of Defendant RBS' settlements with the DOJ, CFTC, and FSA, in addition to Broker Defendant ICAP's settlement with the CFTC demonstrate that Defendants were engaged in a concerted effort to, and in fact successfully did manipulate three month Yen-LIBOR lower:

March 3, 2010:

1st message:

[RBS] Senior Yen Trader: i really need a low 3m jpy libor into the imm any favours

you can get with the due at rbs would be much appreciated

even if he on;ly move 3m down 1bp from 25 to 24

Sterling Broker: i'll give him a nudge later, see what he can do

[RBS] Senior Yen Trader: thanks mate really really would appreciate that

Sterling Broker: haven't seen him since i left so might buy him a steak to

catch up

[RBS] Senior Yen Trader: yeah ... i have a huge fix on the imm so if he moves down

1bp now and leaves it that would be great

2nd Message:

Sterling Broker: can i pick ur brain?

RBS Yen Submitter: yeah

<u>Sterling Broker</u>: u see 3m jpy libor going anywhere btween now and imm?

RBS Yen Submitter: looks fairly static to be honest, poss more pressure on

upside, but not a lot

Sterling Broker: oh we hve a mutual friend who'd love to see it go down, no

chance at all?

RBS Yen Submitter: haha [Senior Yen Trader [Tom Hayes]] by chance

Sterling Broker: shhh

RBS Yen Submitter: hehehe, mine should remain flat, always suits me if

anything to go lower as i reve funds

Sterling Broker: gotcha, thanks, and, if u cud see ur way to a small drop

there might be a steak in it for ya, haha

RBS Yen Submitter: noted ;-)

Sterling Broker: 8-)

March 4, 2010:

RBS Yen LIBOR Submitter: Libor lower ;-)

<u>Trader-6</u>: good work!!!!

App. at 144-45, ¶ 341.

701. As a result, Hayman suffered legal injury when it sold Yen-LIBOR-based swaptions to Merrill Lynch and JPMorgan on March 3, 2010, at artificial prices directly and proximately caused by Defendants' manipulation of Yen-LIBOR.

C. Plaintiffs Hayman and Sonterra

- 702. In addition to transacting at artificial prices on the limited number of days for which Defendants' communications have been released to the public, Plaintiffs also were damaged and suffered legal injury on their other Euroyen-based derivatives positions because Defendants' manipulative conduct rendered Yen LIBOR, Euroyen TIBOR and the prices of Yen LIBOR-based derivatives artificial throughout the entire Class Period.
- 703. Far from intermittent and episodic, the persistent nature of Defendants' manipulative conduct is well documented in their settlements with government regulators. This is confirmed directly by Hayes, who explained in his SFO interviews that he and his coconspirators manipulated Yen-LIBOR to artificial levels on a daily basis and to keep the rate artificial over long periods of time by staying consistent in their efforts:

"For a particular length of time that LIBORs would be, you know, particularly skewed. And I think you know that it's a semi sensible way to do it. Because I think I had in the FSA report I had seven campaigns . . . They weren't random, they were very consistent. I mean, in fact the plan was all about consistency.

You know it was all about doing the same thing on a daily basis..."

704. Defendants' relentless efforts to manipulate Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives, rendered the prices of Euroyen-based derivatives artificial throughout the entire Class Period. As a result, Plaintiffs were damaged and suffered

legal injury when they engaged in transactions for Euroyen-based derivatives at artificial prices proximately caused by Defendants' manipulative conduct.

- X. <u>Defendants Engaged in a Conspiracy in Restraint of Trade by Collusively Fixing the</u> Price of Euroyen-Based Derivatives.
 - A. <u>Direct Evidence Reveals and Factual Admissions Confirm That Defendants, Including UBS, RBS, Rabobank, Deutsche, JPMorgan, Lloyds, Citigroup, ICAP and R.P. Martin Conspired To Fix the Price of Euroyen-Based Derivatives.</u>
 - 705. The instant messages and other communications collected by the DOJ Antitrust Division, the CFTC, and the FSA, and set forth in the Appendix to this Complaint vividly reveal pervasive collusion by UBS, RBS, Rabobank, Lloyds, Deutsche Bank and other Contributor Bank Defendants. Notwithstanding the fact that hundreds of instant messages have been made publicly available, these messages represent but a very small sampling of the total record of all collusive messages.
 - 706. On December 4, 2013, the EC issued a press release announcing a €670 million (\$870 million) fine against Defendants UBS, RBS, Deutsche, JPMorgan, Citigroup and R.P. Martin all in connection with each Defendants involvement in one or more "cartels in Yen Interest Rate Derivatives."
 - 707. The EC uncovered seven (7) distinct bilateral infringements lasting between 1 and 10 months in the period from 2007 to 2010. The collusion included discussions between traders of the participating banks on certain Yen-LIBOR submissions.
 - 708. The traders involved also exchanged, on occasions, commercially sensitive information relating either to trading positions or to future Yen-LIBOR and Euroyen TIBOR submissions.
 - 709. UBS received full immunity for revealing the existence of the cartels. As a result, UBS avoided a fine of around €2.5 billion (\$3.25 billion) for its participation in five of the seven

infringements. Citigroup also received full immunity for one of the infringements in which it participated, thereby avoiding a fine of around €5 million (\$71.5 million).

- 710. For their cooperation with the investigation, the EC granted fine reductions to Citigroup, Deutsche Bank, RBS and R.P. Martin.
- 711. The fines imposed by the EC for the Yen Interest Rate Derivatives Cartels are as follows:

Participant	Duration of	Reduction Under the	Fine (€)
	Participation Per	Leniency Notice (%)	
	Infringement(s)		
UBS (5 infringements)	1 month, 8 months, 5	100% for all	0
	months, 10 months, 1	infringements	
	month		
RBS (3 infringements)	8 months, 5 months,	25 % for one	260,056,000
	3 months	infringement	
Deutsche Bank (2 infringements)	1 month	35%, 30%	79,897,000
JPMorgan (1 infringement)	1 month		79,897,000
Citigroup (3 infringements)	1 month, 2 months, 3	35%, 100%, 40%	70,020,000
	months		
R.P. Martin (1 infringement)	1 month	25%	247,000

- 712. In the context of the same investigation, the EC also opened proceedings against Broker Defendant ICAP. The EC sent a Statement of Objections to Broker Defendant ICAP on June 10, 2014 outlining ICAP's participation in the Yen interest rate derivatives cartels.
- 713. ICAP chose not to settle the proceedings. On February 4, 2015, the EC fined ICAP €14.96 million (approximately \$17 million). The EC found that ICAP facilitated six of the seven Yen interest rate derivatives cartel agreements through various anticompetitive actions, including disseminating misleading information to certain Yen-LIBOR panel banks in the form of "predictions" or "expectations" of the daily Yen-LIBOR fix in 2007-2010; contacting non-cartel Yen-LIBOR panel members to influence their Yen-LIBOR submissions, and serving as a communication channel between Citigroup and RBS traders.

- B. "Plus Factors" Support the Plausible Inference That the Yet-Non-Settling Contributor Bank Defendants Participated in the Conspiracy
- 714. There are at least 8 panel banks and two interdealer brokers, UBS, RBS, Rabobank, Citigroup, J.P. Morgan, Deutsche Bank, HSBC, Lloyds, that regulators have identified as participating in collusive efforts to manipulate Euroyen TIBOR and Yen-LIBOR. Many of these panel banks have been identified by name. Others are identified generically, but as Plaintiffs allege *infra*, reverse engineering of these masked identities reveals some of these panel banks though context or other process-of-elimination strategies. This Section of the Complaint sets forth allegations concerning what courts have identified as "plus factors" that support the reasonable inference that those Contributor Bank Defendants that have not yet settled with government regulators or which have not otherwise been publicly identified as coconspirators actually indeed participated in the widespread antitrust conspiracy uncovered in the Government investigations.
 - 1. Plaintiffs' Econometric Analyses Demonstrate "Market Phenomena That Cannot Be Explained Rationally Except As the Product of Collusion" Involving the Contributor Bank Defendants' Euroyen TIBOR and Yen-LIBOR Submissions during the Class Period
- 715. The first of the so-called "plus factors" that support the complicity of the Yet-Non-Settling Defendant Contributor Banks is the robust and dramatic statistical evidence supporting the conclusion that all Contributor Bank Defendants' Euroyen TIBOR and Yen-LIBOR submissions reflect widespread collusion. *See*, *e.g.*, ¶ 631-643, and Figures 1-24.
 - 2. The Public Evidence Released To Date Reveals that UBS Colluded Directly with Contributor Bank Defendants RBS, JPMorgan, Deutsche Bank, HSBC and Citigroup.
- 716. While the evidence adduced thus far by the regulators do not identify the Yet-Non-Settling Contributor Bank Defendants by name, the masked designations of some of these banks reveal their identity through contextual reverse engineering, as set forth below.

- 717. For example, a criminal complaint was filed in this District against former RBS, UBS and Citigroup Trader Tom Alexander William Hayes and former UBS trader and Yen-LIBOR submitter Roger Darin. *See* Ex. A-6. The Hayes/Darin Criminal Complaint identifies at least four additional, but unnamed Yen-LIBOR panel banks as Banks A, B, C and D. Bank A is described as a Yen-LIBOR panel bank which is "a global financial services company headquartered in New York, New York." Bank B is described as a Yen-LIBOR panel bank which is "a global financial services company headquartered in Frankfurt, Germany." Bank C is described as a Yen-LIBOR panel bank which is "a global financial services company headquartered in Edinburgh, Scotland" and Bank D is described as a Yen-LIBOR panel bank which is "a global financial services company headquartered in New York, New York."
- 718. The Hayes/Darin Criminal Complaint also identifies at least two, but unnamed Brokerage Firms as Brokerage Firm A and Brokerage Firm B. Brokerage Firm A and Brokerage Firm B are described as "London-based, interdealer brokers." Upon information and belief, these brokerage firms are Broker Defendants ICAP and R.P. Martin.
- 719. Upon information and belief, Bank A is Defendant JPMorgan. First, during the period identified in the Hayes/Darin Criminal Complaint (September 2006 through September 2009), JPMorgan was a Yen-LIBOR panel bank. Second, JPMorgan was and is a global financial services company headquartered in New York, New York. Third, public reports identified JPMorgan as a party to the conspiracy along with UBS to have manipulated Yen-LIBOR. JPMorgan has settled such charges with the EC related to JPMorgan's involvement in "Yen Interest Rate Derivatives Cartels." The Hayes/Darin Criminal Complaint references a January 19, 2007 electronic chat where Hayes asked: "bit cheeky but if you know who sets your libors and you aren't the other way I have some absolutely massive 3m fixes the next few days

and would really appreciate a high 3m fix." In this chat, Hayes communicated his "massive" positions and request for a "high 3m fix." Hayes then noted: "Anytime i [sic] can return the favour let me know as the guys here are pretty accommodating to me." Ex. A-6, ¶ 27(a) (emphasis added). Trader A at Bank A agreed to assist Hayes when Trader A replied: "I will try my best."

720. Upon information and belief, Bank B is Defendant Deutsche. First, during the period identified in the Hayes/Darin Criminal Complaint (September 2006 through September 2009), Deutsche was a Yen-LIBOR panel bank. Second, Deutsche is the only Yen-LIBOR panel bank headquartered in Frankfurt, Germany. Third, the Hayes/Darin Criminal Complaint provides the May 21, 2009 electronic chat between UBS Trader Tom Hayes and Trader B at Bank B as an example of a collusive communication to manipulate Yen-LIBOR and the prices of Euroyen-based derivatives. On May 21, 2009, former UBS Trader Tom Hayes asked Trader B at Bank B: "cld you do me a favour would you mind moving you [sic] 6m libor up a bit today, i have a gigantic fix." Trader B replied with "I can do taht [sic]." Following this electronic chat, the Hayes/Darin Criminal Complaint also alleges that "Bank B's 6-month Yen-LIBOR submission ...increased by six basis points compared to its submission the previous day." As a result and as alleged in the Hayes/Darin Criminal Complaint, "the resulting 6-month Yen LIBOR fix was 3/8 of a basis point higher than it otherwise would have been had Trader B left Bank B's submission at the same rate that it had been for the previous 26 trading days." From the 6-month Yen-LIBOR data obtained by Plaintiffs, the only bank to increase their 6-month Yen-LIBOR on May 21, 2009 six basis points was Defendant Deutsche. Deutsche increased its 6-month Yen-LIBOR from 0.65 on May 20, 2009 to 0.71 on May 21, 2009. Deutsche also submitted the exact same rate (0.65) from April 15, 2009 through May 20, 2009 or the previous 26 trading days.

721. Upon information and belief, Bank C is the Royal Bank of Scotland. First, during the period identified in the Hayes/Darin Criminal Complaint (September 2006 through September 2009), RBS was a Yen-LIBOR panel bank. Second, RBS is headquartered in Edinburgh, Scotland. Third, RBS has already admitted to colluding with UBS in the conspiracy to manipulate and restrain trade in the setting of Yen-LIBOR. *See, e.g.*, Ex. B-1, pp. 21-34, ¶¶43-65. Third, the communications in the Hayes/Darin Criminal Complaint mirror the instant messages and other communications in the relevant UBS and RBS settlement documents. For example, the following April 20, 2007 exchange documented in the DOJ Statement of Facts incorporated by reference into the RBS Deferred Prosecution Agreement (Ex. B-1, pp. 28-29, ¶56) occurred:

Hayes: ... if you could ask your guys to keep 3m low wd be massive help as long as it doesn't interfere with your stuff . . . tx in adavance [sic].

Approximately 30 minutes later, Hayes and Trader-3 had the following exchange:

<u>Hayes</u>: mate did you manage to spk to your cash boys?

<u>Trader-3</u>: yes u owe me they are going 65 and 71

<u>Hayes</u>: thx mate yes i do . . .in fact i owe you big time

Approximately 45 minutes later, Hayes sent the following message to Trader-3:

Hayes: mater they set 64! . . . thats beyond the call of duty!

Trader-3: no worries

722. This same conversation is identified in the Hayes/Darin Criminal Complaint. Ex. A-6, ¶32(b). Further, from the 3-month Yen-LIBOR data obtained by Plaintiffs, the only bank to set 3-month Yen-LIBOR at 0.64 on April 20, 2007 was RBS.

723. Upon information and belief, Bank D is Defendant Citigroup. First, during the period identified in the Hayes/Darin Criminal Complaint (September 2006 through September 2009), Citigroup was a Yen-LIBOR panel bank. Second, Citigroup is a global financial services company headquartered in New York, New York. Third, the Hayes/Darin Criminal Complaint alleges that Hayes was employed as a senior Yen swaps trader at Bank D in Tokyo. Ex. A-6, ¶15. From publicly available information, after leaving UBS, Hayes was employed by Citigroup from approximately December 2009 through September 2010. While employed at Citigroup, Hayes continued to collude with, among others, Broker A1, Trader B (identified as Defendant Deutsche above) and a UBS Junior Trader. As alleged in the Hayes/Darin Criminal Complaint, in an electronic chat on May 12, 2010:

Hayes: "libors are going down tonight."

UBS Junior Trader: "why you think so?"

Hayes: "because i am going to put some pressure on people."

724. The Hayes/Darin Criminal Complaint also alleges that while employed at Bank D (Citigroup), Hayes sought to influence Bank C's (identified above as RBS) Yen-LIBOR submissions through another broker working at Brokerage Firm A (identified as "Broker A3"). For example, on or about March 3, 2010, Hayes told Broker A3: "i really need a low 3m yen libor into the imm...any favours you can get with [the Royal Bank of Scotland Submitter] would be much appreciated ... even if [the Royal Bank of Scotland Submitter] on;ly [sic] move 3m down 1bp." Broker A3 then agreed to contact [the Royal Bank of Scotland] Submitter on behalf of Hayes. Following Hayes' request, Broker A3 asked the Royal Bank of Scotland Submitter: "u see 3m yen libor going anywhere btween now and imm?" Broker A3 continued: "we hve a mutual friend who'd love to see it go down, no chance at all?" The Royal Bank of Scotland

Submitter then speculated that the request came from Hayes and replied: "haha TH by chance." Broker A3 then responded: "shhh."

- That next day, on March 4, 2010, the Royal Bank of Scotland's 3-month Yen-LIBOR submission decreased by one basis point to 0.24 compared to the previous day of 0.25, consistent with Hayes's request to Broker A3. RBS was the only Yen-LIBOR panel bank to decrease its 3-month Yen-LIBOR submission by one basis point on March 4, 2010 when compared to the previous day. After the resulting Yen-LIBOR fixings were posted, the Royal Bank of Scotland Submitter told Broker A3: "Libor lower;)." Broker A3 then responded: "good work!!!!"
- 726. Further, this same exchange is identified in the DOJ Statement of Facts incorporated by reference into the RBS Deferred Prosecution Agreement, lending further support to collusion between Citigroup, RBS and unnamed Brokerage Firm A. *See* Ex. B-1, p. 33, ¶ 64.
- 727. Astonishingly, in the period between January 1, 2008 and December 31, 2009, there were approximately 523 trading days, and on approximately 308 of those trading days, Bank D (Citigroup) made submissions in all eight maturities that were identical to the forecasts from unnamed Broker A2, at times down to the fifth decimal point. Ex. A-6, ¶24(c).
- 728. Similarly, the UBS CFTC Order, describes a scheme "hatched" on July 22, 2009 by UBS trader Thomas Hayes along with at least two additional Yen-LIBOR panel banks, identified as "Yen Bank F" and "Yen Bank J," and unidentified "Derivatives Broker A1" to artificially drive down six-month Yen-LIBOR by August 11, 2009. Upon information and belief, Yen Bank F is Deutsche Bank and Yen Bank J is HSBC. The means to carry out the manipulation included the "staggering" of false reports of six-month Yen-LIBOR to the BBA by UBS, Bank F [Deutsche] and Bank J [HSBC], *i.e.*, the reporting of an artificially low (5 basis

points lower) submission by UBS on one day, then the reporting of an artificially low submission of Yen Bank F [Deutsche] on another day, and then the same by Yen Bank J [HSBC]. *See* App. at 135, ¶ 315. The CFTC determined that from late July 2009 through mid-August 2009, UBS's submission fell 12 basis points, and Yen Bank F and Yen Bank J's submissions fell by 14 and 15 basis points, respectively. 6-month Yen-LIBOR data obtained by Plaintiffs shows that UBS's 6-month Yen-LIBOR fell 12 basis points from .72 (on July 22, 2009) to .60 (on August 20, 2009). The only other Yen-LIBOR bank to drop its 6-month Yen-LIBOR 14 basis points over this same period was Defendant Deutsche, from .69 (on July 22, 2009) to .55 (on August 20, 2009). The only other Yen-LIBOR bank to drop its 6-month Yen-LIBOR 15 basis points over this same period was Defendant HSBC, from .7 (on July 22, 2009) to .55 (on August 20, 2009).

- 3. The Pricing Structure of Euroyen-Based Derivatives Lends Itself—As The Evidence Amassed Thus Far By the Regulators Reveals—To Successful Collusion.
- 729. The overwhelming evidence of collusion gathered by the various regulators and discussed in the Complaint and indexed in the Appendix to the Complaint demonstrates that the pricing structure of Euroyen-based derivatives lends itself to successful collusion. The Contributor Bank Defendants concluded that it was in their interest to collude to profit from their proprietary Euroyen-based derivative positions and that these efforts could successfully influence the pricing of such instruments through collusive Euroyen TIBOR and Yen-LIBOR ratesubmissions and other sharing of spot transaction information, including pricing Euroyen TIBOR and/or Yen-LIBOR rate setting. As such, the nature of the Euroyen TIBOR and Yen-LIBOR rate-setting process itself, as shown by the evidence revealed thus far, permits an environment that is susceptible to collusion. As such, the nature of Euroyen-based derivatives, as shown by the evidence revealed thus far, permits an environment that is susceptible to collusion.

 Additionally, because only certain banks can successfully move the prices of Euroyen-based

derivatives, the structure of the price-setting mechanism for those financial products was oligopolistic, making collusion a rational business strategy to fix prices.

- 730. The JBA and BBA rules governing who may submit rates for purposes of determining Euroyen-TIBOR and Yen-LIBOR form a barrier to entry that is not present in highly competitive marketplaces. These restrictions permit those banks with access to the rate submission process a competitive advantage in an environment closed to competitive incursion by new entrants. Because the JBA and BBA rules exclude potential competitor banks from joining the panels and submitting rates, the Euroyen-based derivatives price-setting process is highly susceptible to a successful antitrust conspiracy. The Contributor Bank Defendants (*e.g.*, UBS, RBS and Rabobank, etc.) successfully colluded with one another free from concern that other competitors in Euroyen-based derivatives would be able to thwart their price-fixing efforts.
 - 4. The Evidence Revealed By the Government Investigations (Which Constitutes Only a Slight Fraction of All of the Evidence of Collusion) Shows Many Yen-LIBOR Contributor Banks Were Solicited to Participate or Did Participate in the Conspiracy.
- 731. The instant messages revealed in the Government settlements to date shows that there is a number of Yen-LIBOR Contributor Banks who were solicited to participate or did participate in the conspiracy. For example, on March 31, 2009, UBS Trader Tom Hayes asked Broker-C to help influence 9 of the 16 Yen-LIBOR Contributor Panel Banks by convincing them to lower their Yen-LIBOR submissions from the previous day, thus lowering the resulting 1-month and 3-month Yen-LIBOR fix. As Hayes urged Broker-C:

Tom Hayes: mate we have to get 1m and 3m down . . . 1m barely fell yesterday . . . real important $\,$

Broker-C: yeah ok

Trader-1: banks to have a go w in 1m are

Trader-1: [Bank-F]
Trader-1: [Bank-G]
Trader-1: [Bank-H]

Trader-1:[Bank-E]Trader-1:[Bank-I]Trader-1:[Bank-C]Trader-1:[Bank-A]Trader-1:[Bank-J]Trader-1:and [Bank-K]

Trader-1: pls

Broker-C: got it mate

- 732. These designations, "Bank A", for example, were used by the DOJ in the UBS Statement of Facts. That day, consistent with Tom Hayes's request, 6 of the 9 Yen-LIBOR Contributor Panel Banks listed above lowered their 1-month Yen-LIBOR submissions relative to the previous day, including Contributor Bank Defendants: (i) Sumitomo Mitsui Bank Corp.; (ii) Mizuho Corporate Bank; (iii) Royal Bank of Scotland; (iv) Barclays; (v) Norinchukin Bank; and (vi) Rabobank. As a result, the published 1-month Yen-LIBOR fix dropped by a full basis point from the day before.
- 733. In addition to the Contributor Panel Banks identified in Mr. Hayes' March 31, 2009 message, the UBS DOJ Statement of Facts show that other Contributor Panel Banks participated in collusive activity. For example, on May 21, 2009, another Contributor Panel Bank, designated in the UBS DOJ Statement of Facts as "Bank B", agreed to collude with UBS by artificially increasing the 6-month Yen-LIBOR submission on that day. *See* App. at 109 ¶ 262.
- 734. Taken together, these two messages demonstrate that ten (10) Yen-LIBOR Contributor Banks (Banks A-C, E-K), were either solicited to collude or did indeed collude, with UBS in restraint of trade. *See also e.g.*, ¶¶ 334-351 (the successful manipulation of three-month Yen-LIBOR on February 25, 2009).

- 5. Employees At Certain Yet-Non-Settling Contributor Bank and Broker Defendants Were Fired for Cause, Suggesting Complicity In the Manipulation of Prices of Euroyen-Based Derivatives, At the Least.
- 735. As previously alleged, dozens of traders and brokers formerly employed by the Contributor Bank Defendants have been fired for their participation in rate manipulation. Some have been criminally charged. Against the backdrop of the rampant collusion incident to the manipulation of Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen-based derivatives uncovered by the various regulators, these firings and criminal charges lend further credence to the plausibility of Plaintiffs' allegations that the Yet-Non-Settling Contributor Bank and Broker Defendants participated in the collusion.
 - 6. Investigations and Criminal Charges Reveal That Certain Yet-Non-Settling Contributor Bank Defendants Participated in the Conspiracy.
- 736. As alleged above, the JSESC concluded that "Trader B" at Citigroup's Japanese affiliate "continuously conducted approaches such as questioning persons in charge of submitting the TIBOR rates of other banks . . . since Trader B joined the Company in December 2009, for the purpose of fluctuating TIBOR so as to give advantages to" Citigroup's Euroyen-based derivatives positions. Trader B is former UBS Senior Yen Trader Thomas Hayes.

7. Government Investigations Are Continuing.

737. Numerous government investigations in the U.S. and abroad, including by the DOJ, the CFTC, the EU, the FSA, NYSDFS, BaFin, Swiss COMCO and Japanese regulators, into the alleged manipulation of Euroyen-based derivatives are ongoing. The full scope of those investigations have not yet been publicly revealed.

A. The Conspiracy to Fix The Prices of Euroyen-Based Derivatives Constituted an Agreement in Restraint of Trade

738. The abundant evidence of collusive price fixing of Euroyen-based derivatives uncovered by the regulators and cited herein restrained trade across a variety of channels of

competition. Just like a traditional "brick and mortar" price fixing conspiracy, where manufacturers collude to set a pricing formula for their goods, the Contributor Bank Defendants colluded to fix the prices of their Euroyen-based derivatives through various means, including sharing price and volume information with competitors for the purpose of coordinating prices and agreeing to set Yen-LIBOR and Euroyen TIBOR prices either lower or higher, depending upon their mutual financial interests. This price-fixing resulted in no less of a restraint of trade than a traditional agreement to fix the wholesale prices of, for example, washing machines. The market for Euroyen-based derivatives was unlawfully restrained by price fixing because collusion, rather than the forces of supply and demand, set artificially supracompetitive and, at times, infracompetitive prices for these derivatives.

B. The Conspirators Were Horizontal Competitors In Euroyen-Based Derivatives.

739. Each of the Contributor Bank Defendants were competitors with one another for attracting transactions in Euroyen-based derivatives. Indeed, it was by virtue of their position as competitor banks in this market that these Defendants secured their position as a Yen-LIBOR and Euroyen TIBOR contributor banks. These banks competed for financial positions in this derivatives market in the position of horizontal competitors not only insofar as they occupied the same level of distribution in the marketplace, but because they competed with one another to attract customers for Euroyen-based derivatives transactions and/or to purchase and sell Euroyen-based derivatives contracts and/or to profit or lose on their activities in the foregoing.

C. The Collusive Conduct Fixed Prices and Restrained Trade or Changed Output.

740. The collusion alleged herein fixed the prices of Euroyen-based derivatives prices when the cartel members agreed to share pricing information and coordinate prices for their derivatives. Moreover, the collusion had the effect of restraining or changing output in the

derivatives market because market participants naturally responded to the changed prices. The volume of derivatives transactions was therefore restrained and output changed.

- 741. An example from the many instant messages that reveal collusion among Defendants is instructive. On July 29, 2009, a broker was communicating with a trader at UBS. The broker referenced recent "small reductions" in UBS's Yen-LIBOR rate submissions. The broker mentioned that "External Trader E" at a competing panel bank (Contributor Bank Defendant) was "building positions" in the hopes that the rate would increase. The broker stated that "External Trader E" "... could be in for a shock going into august ... the three muscateers [sic] could do him a fair bit of damage." When referencing "three muscateers [sic]," the broker was referring to UBS and two other panel banks (not employing External Trader E). *See* App. at 138, ¶ 320.
- 742. This instant message shows how the Contributor Bank Defendants *competed* when they set Yen-LIBOR and colluded in an effort to enhance their competitive positions. The "three muscateer [sic]" Contributor Bank Defendants, including UBS, had an agreement to try to set Yen-LIBOR lower during the period when External Trader E was "building positions" on the hope that the rate would go higher. Contributor Bank Defendants had competing financial interests in where the rates came out, so they competed in setting the rates. To enhance their competitive rate-setting positions, the Contributor Bank Defendants entered into agreements in restraint of trade to influence the JBA and BBA setting of Euroyen TIBOR and Yen-LIBOR in violation of Section 1 of the Sherman Act.
- 743. The alleged rate-setting collusion harmed competition among sellers and buyers of Euroyen-based derivatives. Contributor Bank Defendants' Yen-LIBOR and Euroyen TIBOR submissions are supposed to be a proxy for the competitive borrowing rate of each bank. The

counterparties to financial instruments that use Yen-LIBOR and/or Euroyen TIBOR do so for the reason that they know that these rates reflect competitive supply and demand influences on the Yen interbank lending market. It is because these rates reflect such competitive prices that they are so commonly used in Euroyen-based derivative contracts to set pricing. When, as here, banks and others colluded and altered Yen-LIBOR and Euroyen TIBOR from competitively set prices to collusively fixed prices, competition in the Euroyen-based derivatives *a fortiori* was affected at the very instant and in the very same manner that the rate itself was collusively set. The price of Euroyen-based derivative contracts—set by collusion—became inherently anticompetitive in the same manner as Yen-LIBOR and Euroyen TIBOR itself became anticompetitive.

D. The Government Settlements to Date Reveal a High Number of Inter-Firm Communications

744. The UBS, RBS, Rabobank, ICAP, Deutsche Bank, and R.P. Martin Settlement documents reveal a high number of inter-firm communication between their traders and brokers and unidentified traders and brokers at other Contributor Bank and Broker Defendants. In all, there are at least 300 instant messages that evidence explicit and implicit agreement among traders, submitters and/or brokers at UBS, RBS, Rabobank, ICAP, R.P. Martin, Deutsche Bank, and other Contributor Bank and Broker Defendants to fix the prices of Euroyen-based derivatives. For example, the FSA determined that former UBS Senior Yen Trader Hayes made thirty-nine (39) manipulative requests in July 2009 alone to an unnamed broker, identified as "Broker F of Broker Firm C." Public reports later revealed that Broker Firm C is Broker Defendant Tullett.

- E. Specifically Citing Antitrust Concerns, the JBA Euroyen TIBOR Publication Rules Explicitly Proscribe Advance Information Exchange and Coordination Among Rate-Setting Banks.
- 745. The Japanese Bankers Association published rules, governing TIBOR publication. These rules, entitled "JBA TIBOR Publication Rules" governed both Euroyen TIBOR and Japanese Yen TIBOR. The Euroyen TIBOR part of these rules apply to rates that "reflect[] prevailing conditions in the Japan Offshore Market."
- 746. The JBA Rules specifically warn the reference banks against behavior that would violate the Japanese Antimonopoly Law. Specifically, the JBA Rules stated that "[r]eference banks and market participants must exercise caution when utilizing the JBA TIBOR to prevent engagement in activities that would constitute a violation of the Antimonopoly Law." The JBA Rules included an addenda entitled "Reference: Notes of Publication of the JBA Japanese Yen TIBOR" ("JBA Rules Addendum").
- 747. The JBA Rules Addendum noted that certain actions of reference banks may violate the Japanese Antimonopoly Law, including "advance exchange of information and coordination among reference banks on quoted rate levels to be furnished to [the JBA's] service providers," the precise conduct alleged to be illegal in this lawsuit.
- 748. In promulgating rules designed to address antitrust concerns over advance exchange of information and coordinating rate submissions, the JBA recognized that the very conduct disclosed in the many regulatory investigations had significant anticompetitive effects.

CLASS ACTION ALLEGATIONS

749. Plaintiffs brings this action pursuant to Rule 23 of the Federal Rules of Civil Procedure on their own behalf and as representatives of the following Class: ⁸⁹

All persons or entities that engaged in a U.S. based transaction of a financial instrument priced, benchmarked, settled to or otherwise affected by Yen-LIBOR or Euroyen TIBOR during the period of at least January 1, 2006 through at least June 30, 2011 (the "Class Period"). A U.S. based transaction means a transaction by a U.S. Person, or by a Person from or through a location within the U.S. Excluded from the Class are the Defendants and any parent, subsidiary, affiliate, or agent of any Defendant.

- 750. The Class is so numerous that the individual joinder of all members is impracticable. While the exact number of Class members is unknown to Plaintiffs at this time, Plaintiffs are informed and believe that at least thousands of geographically dispersed Class members transacted in Euroyen-based derivatives worth billions of dollars during the Class Period.
- 751. Plaintiffs' claims are typical of the claims of the other members of the Class.

 Plaintiffs and the members of the Class sustained damages arising out of Defendants' common course of conduct in violation of law as complained of herein. The injuries and damages of each member of the Class were directly caused by Defendants' wrongful conduct in violation of the laws as alleged herein.
- 752. Plaintiffs will fairly and adequately protect the interests of the members of the Class. Plaintiffs are adequate representatives of the Class and have no interests which are adverse to the interests of absent Class members. Plaintiffs have retained counsel competent and experienced in class action litigation, including commodity manipulation and antitrust class action litigation.

⁸⁹ Plaintiffs have defined the Class based on currently available information and hereby reserve the right to amend the definition of the Class, including, without limitation, the Class Period.

- 753. Common questions of law and fact exist as to all members of the Class which predominate over any questions affecting solely individual members of the Class. These common questions of law and facts include, without limitation:
 - (a) Whether Defendants unlawful acts violate Section 1 of the Sherman Act;
 - (b) Whether Defendants unlawful acts violate RICO;
 - (c) Whether Defendants engaged in wire fraud;
 - (d) Whether Defendants engaged in a pattern of racketeering activity;
 - (e) Whether Defendants' unlawful conduct caused injury to the business or property of Plaintiffs and the Class;
 - (f) Whether Defendants were unjustly enriched at the expense of Plaintiffs and members of the Class;
 - (g) The operative time period and extent of Defendants' foregoing violations; and
 - (h) Whether such injury or the fact or extent of such artificiality may be established by common, class-wide means, including, for example, by regression analysis, econometric formula, or other economic tests.
- 754. A class action is superior to other methods for the fair and efficient adjudication of this controversy because joinder of all Class members is impracticable. Treatment as a class action will permit a large number of similarly situated persons to adjudicate their common claims in a single forum simultaneously, efficiently, and without the duplication of effort and expense that numerous individual actions would engender. Class treatment will also permit the adjudication of claims by many class members who could not afford individually to litigate claims such as those asserted in this Complaint. The cost to the court system of adjudication of such individualized litigation would be substantial. The prosecution of separate actions by individual members of the Class would create a risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for Defendants.

755. Plaintiffs are unaware of any difficulties that are likely to be encountered in the management of this action that would preclude its maintenance as a class action.

EQUITABLE TOLLING AND FRAUDULENT CONCEALMENT

- 756. The statute of limitations relating to the claims for relief alleged herein (*see* ¶¶ 787-860) were tolled because of fraudulent concealment, including: (1) Defendants' active acts of concealment that were independent of the acts that constituted the underlying conduct giving rise to their liability; and (2) the inherently self-concealing nature of Defendants' misconduct. Plaintiffs and the Class had no knowledge of Defendants' unlawful and self-concealing manipulative acts and could not have discovered same by the exercise of due diligence until July 26, 2011 as to Defendant UBS only and until February 2012 as to several other Contributor Panel Banks and Broker Defendants.
- 757. Plaintiffs and the Class' investigation of their claims required time and resources to identify additional Defendant wrongdoers through, among other things, economic analysis of public submission data and "reverse engineering" to identify unnamed co-conspirator Contributor Panel Banks and brokers. At least one Defendant, Lloyds Bank, represented to Plaintiffs and the Class' counsel that its internal investigation revealed no instances of wrongdoing, inducing them to voluntarily dismiss the action and entering into a tolling agreement. It was not until later disclosures by other co-conspirators revealed to counsel, through additional "reverse engineering" efforts, and Lloyds own LIBOR settlement, that the public information revealed Lloyds' culpability that Plaintiffs and the Class determined that Lloyds misrepresented the facts. With each succeeding indictment and government investigation disclosure, more and more information is revealed and additional Defendants and the scope of Defendants' wrongdoing becomes clearer.

758. UBS' July 26, 2011 disclosure is the earliest Plaintiffs could have suspected UBS' role in the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. Plaintiffs could not have suspected, much less known, of the other Contributor Bank or Broker Defendants involvement in the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives until much later. Plaintiffs thus assert the tolling of the applicable statute of limitations affecting the rights of the claims of relief asserted by Plaintiffs. Defendants are also equitably estopped from asserting that any otherwise applicable limitations period has run.

A. <u>Dates of Initial Public Disclosures</u>

759. On March 15, 2011, UBS disclosed in its 2010 annual report (at page 318 of 430) that it had received subpoenas from the Commodity Futures Trading Commission, U.S. Department of Justice, and other U.S. government agencies, as well as an information request from the Japanese Financial Supervisory Agency, as follows:

UBS has received subpoenas from the SEC, the US Commodity Futures Trading Commission and the US Department of Justice in connection with investigations regarding submissions to the British Bankers' Association, which sets LIBOR rates. UBS understands that the investigations focus on whether there were improper attempts by UBS, either acting on its own or together with others, to manipulate LIBOR rates at certain times. In addition, UBS has received an order to provide information to the Japan Financial Supervisory Agency concerning similar matters. UBS is conducting an internal review and is cooperating with the investigations.

- 760. UBS failed to mention in its 2010 annual report whether the foregoing investigations related to submissions for Yen-LIBOR or Euroyen TIBOR (or other rates).
- 761. It was not until UBS filed a Form 6-K with the SEC on July 26, 2011 that UBS disclosed for the first time that it had received conditional leniency from the Antitrust Division of the U.S. Department of Justice in connection with potential antitrust or competition law violations related to submissions of Yen-LIBOR and Euroyen TIBOR. The July 26, 2011 Form

6-K was the first public disclosure by UBS of allegations of false reporting by it with respect to Yen-LIBOR or Euroyen-TIBOR.

- 762. UBS' July 26, 2011 disclosure is the earliest Plaintiffs could have suspected UBS' role in the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives. Plaintiffs could not have suspected, much less known, of the other Contributor Bank or Broker Defendants involvement in the manipulation until much later.
- Canadian Competition Commission ("CCB") joined U.S., European and Japanese regulators in investigations into reference banks collusion and resulting manipulation of Euroyen TIBOR and Yen-LIBOR. Later, on February 17, 2012, The Wall Street Journal reported that "lawyers acting for the cooperating bank had told [the CCB] that traders at six banks on the yen Libor panel—Citigroup Inc., Deutsche Bank AG, HSBC Holdings plc, J.P. Morgan Chase & Co., Royal Bank of Scotland Group PLC and UBS—'entered into agreements to submit artificially high or artificially low' quotes" The same report also confirmed that the CCB was investigating whether the traders also "conspired" with individuals at individual interdealer broker firms, including Broker Defendants ICAP and R.P. Martin, "to use their influence with yen Libor submitters to affect what rates were submitted by other yen Libor panel banks." The foregoing reports in February 2012 are the first public disclosures of Broker Defendants ICAP and R.P. Martin involvement in the manipulation of Yen-LIBOR or Euroyen-TIBOR.
- 764. Additional public disclosures of other Contributor Bank and Broker Defendants' involvement in the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives came even later than February 2012. For example, the first public disclosure of the involvement of Broker Defendants ICAP Europe Limited and Martin Brokers (UK) Ltd. in

the manipulation of Yen-LIBOR did not occur until ICAP Europe Limited settled civil charges with the CFTC and FCA on September 25, 2013 and Martin Brokers (UK) Ltd. settled same with the CFTC and FCA on May 15, 2014. Similarly, the first public disclosure of Broker Defendant Tullett Prebon's involvement in the manipulation of Yen-LIBOR did not occur until February 2013 when news reports speculated that Tullett Prebon conspired with former UBS and Citigroup Senior Yen Trader Thomas Hayes. In response to the public reports, a Tullett Prebon spokesperson commented that "Tullett Prebon has never been informed by the FSA [Financial Services Authority] or any other regulatory authority that Tullett Prebon or any of its brokers are under investigation in relation to LIBOR." Thus, it was not until June 20, 2013 when the U.K. SFO identified Tullett Prebon as an alleged co-conspirator of former UBS and Citigroup Senior Yen Trader Thomas Hayes in the manipulation of Yen-LIBOR and other interbank offered rates that Plaintiffs had knowledge of Tullett Prebon's involvement in the alleged conspiracy and manipulation.

B. Plaintiffs' Due Diligence Efforts

765. Plaintiffs actively monitor their investments to ensure that there is no evidence of fraud or irregularities in their trading positions and did so in connection with their Euroyen-based derivatives during the Class Period. This monitoring included having investment professionals analyzing market trends and economic data associated with their investments and public information concerning the markets in which they were investing. Prior to the times identified above when public disclosures were made, Plaintiffs, much like their similarly situated class members, had no suspicion of, nor reason to know, that Defendants were engaged in widespread collusion and manipulation of Yen-LIBOR and Euroyen TIBOR. Hence, despite Plaintiffs' due diligence, they were unable to discover the fraud alleged herein until public disclosures raised

their suspicions as to UBS and then they investigated the culpability of others through their lawyers' investigatory work.

766. The Structure of the Yen-LIBOR and Euroyen TIBOR Submission Process Gave Plaintiffs No Reason To Suspect Defendants Were Engaged in Wrongdoing.

- 767. In order to ensure that Yen-LIBOR constituted the average competitive market interest rate, the Defendants, through their trade organization known as the British Bankers Association ("BBA"), promulgated certain Instructions. By promulgating these Instructions through their BBA trade organization and then making daily Yen-LIBOR submissions purportedly pursuant to these Instructions, each Defendant impliedly but repeatedly represented that its submissions complied with the Instructions. By such conduct, each Defendant represented that its submissions transmitted to the markets reflected that Defendant's competitive market borrowing rate.
- 768. Specifically, each Defendant's conduct was undertaken pursuant to and impliedly represented that it complied with, among others, the following Instructions promulgated by the BBA:
 - A. An individual BBA LIBOR Contributor Panel Bank will contribute the rate at which it could borrow funds, were it to do so by asking for and then accepting inter-bank offers in reasonable market size just prior to 1100.
 - B. Rates shall be contributed for currencies, maturities and fixing dates and according to agreed quotation conventions.
 - C. Contributor Banks shall input their rate without reference to rates contributed by other Contributor Banks.
 - D. Rates shall be for deposits:

- made in the London market in reasonable market size;
- that are simple and unsecured....
- G. The Designated Distributor will endeavor to identify and arrange for the correction of manifest errors in rates input by individual Contributor Banks prior to 1130.

The Designated Distributor will publish the average rate and individual Contributor Banks' rates at or around 1130hrs London time.

Remaining manifest errors may be corrected over the next 30 minutes. The Designated Distributor then will make any necessary adjustments to the average rate and publish it as the BBA LIBOR Fixing at 1200hrs."90

- 769. The foregoing Instructions ensured in at least three ways that Yen-LIBOR submissions constituted a competitive market rate and that the Yen-LIBOR average was publishing a competitive average market rate. First, each individual bank was to make its own submission relating to the competitive market rate at which it could borrow funds. *See* Instruction "A" above. This borrowing rate was expressly limited to that for loans of "reasonable market size." The "reasonable market size" requirement for each bank's estimate of borrowing costs, most closely captured the competitive market borrowing rate.
- 770. Second, each panel bank was prohibited from referring to, or coordinating with other panel banks in the submissions that such panel bank made. See Instruction "C" above.

⁹⁰ https://web.archive.org/web/20080930203457/http:/www.bba.org.uk/bba/jsp/polopoly.jsp?d=225&a=1413&artpage=all (last viewed July 23, 2015) (emphasis added).

This prohibition of information sharing was reinforced and further ensured by the Instruction "G" above. Specifically, Instruction "G" mandated that there would be only a simultaneous release of all banks' rates. Such simultaneous release prevented any coordination among the banks after receipt from the BBA of another bank's rate. This forced each bank individually to submit its own competitive rate for borrowing.

- 771. Third, the Yen-LIBOR rate was that applicable to deposits made in the "market" and, even then, only those which were of "reasonable market size." See Instruction "D" above. These requirements further ensured that Yen-LIBOR reflected a competitive "market" rate. Instruction "D" prohibited the use, for example, as the basis for each bank's submission of any non-market borrowing rates. It even prohibited market rates for irregular sizes. Once again, these requirements most closely captured the competitive market rate.
- 772. Taken together, the foregoing Instructions, if followed, rendered Yen-LIBOR the average competitive market borrowing rate. Such Instructions prohibited each bank's Yen-LIBOR submission from reflecting any collusion, coordination, advance notice among the competing banks, or sharing (directly or through brokers) of their intended rate submissions.
- 773. Similarly, the Instructions, taken together, prohibited each individual bank from using its self-interest in profits on its derivatives positions as a substitute for its competitive borrowing rate in determining the rate submission the bank would make.
- 774. On the contrary, the sole basis for the submission by each bank was limited to "the rate at which it could borrow funds…in reasonable market size just prior to 1100." See Instruction "A" above. Defendants, through the BBA, made this requirement even more explicit during 2008 when they stated that the

basis for a ... bank's submissions ...was to be the rate at which members of the bank's staff primarily responsible for management of the bank's cash, rather than

the bank's derivatives trading book, believed that the bank could borrow unsecured inter-bank funds in the London money market. Further, according to the BBA, a Contributor Panel bank should not have contributed a rate based on the pricing of any derivative financial instrument. In other words, a Contributor Panel bank's LIBOR submissions should not have been influenced by its motive to maximize profit or minimize losses in derivatives transactions tied to LIBOR. ⁹¹

775. By continuing to make their Yen LIBOR submissions, each Defendant impliedly represented that it was submitting its competitive market borrowing rate and was not submitting a non-competitive rate that served its interests in manipulating the markets. Defendants continued to make these representations long after their re-affirmance in 2008 (quoted above) that their submissions were to reflect their competitive market borrowing rate rather than their self-interest in manipulating prices.

776. However, these representations were false and fraudulent. For example,
Defendant UBS continued to make false and manipulative submissions from 2005 through 2010.
Accordingly, UBS and other Defendants intentionally and carefully limited their
communications to secret communications that were either outside of business channels or in
private chatrooms, emails, and through traders' personal cellphones. Thereby, Defendants
intentionally, affirmatively and fraudulently concealed the facts that they were conspiring among
themselves to make, on virtually a daily basis, manipulated submissions of non-competitive rates
that benefited their Euroyen-based derivatives positions.

The Manipulative and Collusive Conduct Was Inherently Self-Concealing.

The conduct that gives rise to the violations of law set forth herein are inherently self-concealing.

See, e.g., In re Natural Gas Commodity Litig., 337 F. Supp. 2d 498, 513 (S.D.N.Y. 2004)

("[a]mong the principal allegations against Defendants are assertions that they reported false trade data to entities that collect that information for public dissemination, and that they engaged

⁹¹ See Exhibit I-1.

in fraudulent wash trades...Such activities are inherently self-concealing."); *In re Issuer Plaintiff Initial Pub. Offering Antitrust Litig.*, 00 CIV. 7804 (LMM), 2004 WL 487222, at *4 (S.D.N.Y. Mar. 12, 2004) (recognizing that bid-rigging and price-fixing conspiracies are inherently self-concealing) (citing *State of N.Y. v. Hendrickson Bros., Inc.*, 840 F.2d 1065, 1084 (2d Cir. 1988)). Further, as certain of defendants' traders recognized, the manipulation of Euroyen TIBOR and Yen-LIBOR required that it remain concealed from the BBA, regulators and the public in order to insure its success over an extended period of time. (*See, e.g.*, ¶¶ 514-517).

- their Violations of Law. In addition to and separate from the inherently self-concealing manipulative and acts alleged herein as to Defendants' Yen LIBOR and Euroyen TIBOR manipulation and collusion, many Defendants engaged in extraordinary measures to hide their wrongdoing from government investigators and their victims, including Plaintiffs. These acts included:
 - (1) avoiding discussing the manipulation of Yen-LIBOR and Euroyen TIBOR in public forums (*see*, App. *passim_*);
 - (2) directing their Euroyen-based derivatives traders and Yen-LIBOR and Euroyen TIBOR submitters to limit their internal written communications discussing the manipulation of Yen-LIBOR and Euroyen TIBOR (*see*, *e.g.*, ¶¶ 260, 515);
 - (3) agreeing to stagger the submission of false reports over successive trading days and over extended periods of time (*e.g.*, agree that an artificially low rate would be submitted by co-conspirator A today, by co-conspirator B tomorrow and co-conspirator C the next day, etc.) in order to exert a greater and longer-lasting manipulative impact on Euroyen-based derivative prices and to mask their false reporting from other market players (*see*, *e.g.*, ¶¶ 354-55_);
 - (4) concocting false stories they could give in the event someone (*e.g.*, the BBA, JBA, regulators, or other market participants) questioned their false Yen-LIBOR or Euroyen TIBOR submissions (*see*, *e.g.*, ¶¶ 497-512);
 - (5) lying to their own attorneys during internal investigations of rate manipulation, including falsely claiming that their Yen trading desks did not have any derivative positions with exposure to Euroyen rates and the interest rate submission process did not take into account trading positions (*see*, *e.g.*, ¶¶ 201, 522);

- (6) having the Broker Defendants disseminate false run-thrus or "Suggested LIBORs" daily to signal false directional trends of future Euroyen rates (*see, e.g.*, ¶¶ 312-24);
- (7) having Broker Defendants post and disseminate false or "spoof" bids and offers regarding prevailing Euroyen rates (*see*, *e.g.*, ¶¶ 328-31);
- (8) engaging in wash trades and other illicit sham transactions to surreptitiously pay the Broker Defendants for their assistance in manipulating Yen-LIBOR and Euroyen TIBOR (*see*, *e.g.*, ¶¶ 359-71);
- (9) paying bribes and kickbacks to Broker Defendants for their LIBOR "fixing services" to maintain the Broker Defendants cooperation and continue the successful manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives (*see*, *e.g.*, ¶¶ 372-80);
- (10) spoliating evidence of their wrongdoing by destroying LIBOR-related phone recordings and other documents after being put on notice of government investigations (*see*, *e.g.*, ¶ 13, 512);
- (11) lying to regulators and concealing the findings of LIBOR manipulation by one regulator from another regulator (*see*, *e.g.*, ¶¶ 498-505);
- (12) using electronic chat rooms open only to a select group of traders and brokers (*see*, App. *passim*);
- (13) using code words to avoid detection like "arbi" to signal a manipulative request or "curry" to indicate a bribe for advancing the manipulation was coming (see, e.g., ¶¶ 513-16);
- (14) intentionally taking manipulative communications "offline" to continue the manipulative conversations in-person or on personal cellphones or through text messaging to avoid detection (*see*, *e.g.*, ¶¶ 358, 484, 776);
- (15) reorganizing trading desks to facilitate verbal communication, and eliminate written communication, between their Euroyen traders and submitters (*see*, *e.g.*, ¶¶ 172-76);
- (16) having compliance officers falsely attest to the BBA that they audited their LIBOR submission processes (*see*, *e.g.*, ¶¶ 508-09);
- (17) refusing to conduct internal audits of Yen-LIBOR and Euroyen TIBOR submissions processes referring to the audits as nothing more than "an arse-covering exercise [by the BBA]" (see, e.g., ¶ 508);
- (18) maintaining no LIBOR-specific systems and controls that could detect LIBOR-related "buzz words" indicative of manipulation (*see*, *e.g.*, ¶ 509); and
- (19) putting in place lax compliance standards they knew would not detect wrongdoing (see, e.g., ¶ 195).

Been Revealed to Plaintiffs Within the Last Month Through Testimony Adduced at

Former UBS and Citibank Trader Thomas Hayes' United Kingdom Criminal Trial. For example, Hayes explained to ICAP broker Darrell Read in a March 2010 telephone conversation that Citi's Yen-LIBOR submitters were generally not receptive to manipulative requests unless the requests were made "offline." Hayes stated to Read in words or substance, "You know because they were like pretty reluctant to do anything on the libors but if you talk to them like you now on a non recorded line. Blah blah blah...."

C. Government Proceeding Antitrust Tolling

- 780. Plaintiffs' claims are also tolled by operation of 15 U.S.C. §16(i).
- 781. Section 16(i) provides, in relevant part:
 - Suspension of limitations. Whenever any civil or criminal proceeding is instituted by the United States to prevent, restrain, or punish violations of any of the antitrust laws,..., the running of the statute of limitations in respect of every private or State right of action arising under said laws and based in whole or in part on any matter complained of in said proceeding shall be suspended during the pendency thereof and for one year thereafter...
- 782. As alleged herein, the United States has filed criminal proceedings, including criminal antitrust indictments against former traders and brokers of the Contributor Bank and Broker Defendants. This private action seeks antitrust damages arising under the Sherman Act and is based in large part on the matters complained of in the United States' criminal proceedings. As a result, under Section 16(i) of the Sherman Act, Plaintiffs' claims are currently tolled and have been tolled since the date these criminal proceedings were instituted.
- 783. For example, on December 19, 2012, the Criminal Division (Fraud Section) and the Antitrust Division of the U.S. Department of Justice unsealed a criminal complaint previously filed on December 12, 2012 in this District against former RBS, UBS and Citigroup

Trader Tom Alexander William Hayes and former UBS trader and Yen-LIBOR submitter Roger Darin. See Ex. A-6, Complaint filed in *United States of America v. Tom Alexander William Hayes, and Roger Darin*, 12 MAG 3229 (S.D.N.Y. Dec. 12, 2012) (the "Hayes/Darin Criminal Complaint"). The Hayes/Darin Criminal Complaint identifies at least four additional, unidentified Yen-LIBOR panel banks as Banks A, B, C and D. The Hayes/Darin Criminal Complaint also identifies at least two, unidentified Brokerage Firms as Brokerage Firm A and Brokerage Firm B. Both Hayes and Darin were charged with conspiracy to commit wire fraud. Hayes was also charged with a violation of Section 1 of the Sherman Act due to alleged anticompetitive conduct in relation to Yen-LIBOR from at least September 2006 through September 2009.

784. On April 23, 2015, the Department of Justice charged Defendant Deutsche Bank AG with a criminal violation of Section 1 of the Sherman Act, by filing a Criminal Information in the U.S. District Court for the District of Connecticut. (Docket No. 3:15-cr-61 (ENC)). The price-fixing count of Deutsche Bank's Criminal Information provides:

From at least as early as 2008 through at least 2010, the defendant, Deutsche Bank AG, through its employees, and its co-conspirators, engaged in a combination and conspiracy in unreasonable restraint of interstate and foreign commerce. The aforesaid combination and conspiracy consisted of an agreement, understanding and concert of action among the Defendants and its co-conspirators, the substantial terms of which were to fix the price of Yen LIBOR-based derivative products by fixing Yen-LIBOR, a key component of the price thereof, on certain occasions.

In violation of Title 15, United States Code, Section 1.⁹²

785. This action remains pending subject to Deutsche Bank's fulfillment of detailed requirements set forth in a Deferred Prosecution Agreement with the United States Department of Justice, Criminal Division, Fraud Section and Antitrust Division on April 23, 2015.

⁹² Exhibit I-7.

786. Plaintiffs' claims are in large part based on the same facts and circumstances that underlie the United States criminal complaint against former UBS traders Thomas Alexander William Hayes and Roger Darin as well as Deutsche Bank's Criminal Information. Plaintiffs expressly rely on the United States' criminal complaint against former UBS traders Thomas Alexander William Hayes and the Deutsche Bank criminal indictment and Roger Darin in pleading their claims. *See e.g.*, Ex. A-6, Ex I-7. The United States' actions against both former UBS traders Thomas Alexander William Hayes and Roger Darin remains pending and, as a result, the statutes of limitations on Plaintiffs' claims are currently suspended by operation of 15 U.S.C. §16(i).

CLAIMS FOR RELIEF

FIRST CLAIM FOR RELIEF

Conspiracy to Restrain Trade in Violation of § 1 of the Sherman Act

Coordinated Submission of False Yen-LIBOR and Euroyen TIBOR Submissions to the BBA and JBA

Against all Defendants

- 787. Plaintiffs hereby incorporate each preceding and succeeding paragraph as though fully set forth herein.
- 788. Defendants and their unnamed co-conspirators entered into and engaged in a combination and conspiracy in an unreasonable and unlawful restraint of trade in violation of § 1 of the Sherman Act, 15 U.S.C. § 1, *et seq*.
- 789. During the Class Period, Defendants entered into a series of agreements designed to create profit or limit liabilities amongst themselves by coordinating the manipulation of Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives, by conspiring to, *inter*

alia, make false submissions to the BBA and JBA designed to artificially suppress, inflate, maintain, or otherwise alter Yen-LIBOR and Euroyen TIBOR.

- TIBOR caused injury to both Plaintiff and members of the Class because they were deprived of the benefit of a legitimate and accurate Yen-LIBOR and Euroyen TIBOR that reflected actual market conditions. Plaintiffs and members of the Class also were deprived of the ability to accurately price Euroyen-based derivatives entered into during the Class Period and to accurately determine the settlement value of Yen-LIBOR interest rate swaps, Yen foreign exchange forwards and other Euroyen-based derivatives by reference to an accurate Yen-LIBOR and/or Euroyen TIBOR. Plaintiffs and members of the Class thus received, during the term of their transactions and upon settlement, less in value than they would have received absent Defendants' conspiracy and overt acts taken in furtherance thereof.
- 791. The conspiracy is a *per se* violation of § 1 of the Sherman Act. Alternatively, the conspiracy resulted in substantial anticompetitive effects in the over-the-counter and exchange traded Euroyen-based derivatives market. There is no legitimate business justification for, or pro-competitive benefits caused by, Defendants' conspiracy and overt acts taken in furtherance thereof. Any ostensible pro-competitive benefits are pretextual or could have been achieved by less restrictive means.
- 792. As a direct, material, and proximate result of Defendants' violation of § 1 of the Sherman Act, Plaintiffs and the Class have suffered injury to their business and property, within the meaning of § 4 of the Clayton Act, throughout the Class Period.
- 793. Plaintiffs and members of the Class seek treble damages for Defendants' violations of \$1 of the Sherman Act under \$4 of the Clayton Act.

794. Plaintiffs and members of the Class also seek an injunction against Defendants, preventing and restraining the violations alleged above, under § 16 of the Clayton Act.

SECOND CLAIM FOR RELIEF

For Price Fixing In Violation of § 1 of the Sherman Act Non-Rate-Setting Collusion

Making False Bids and Offers, Engaging in Sham Transactions, Wash Trading, and Coordinating Manipulative Trading of Euroyen-Based Derivatives

Against All Defendants

- 795. Plaintiffs hereby incorporate each preceding and succeeding paragraph as though fully set forth herein.
- 796. Defendants and their unnamed co-conspirators entered into and engaged in a combination and conspiracy in an unreasonable and unlawful restraint of trade in violation of § 1 of the Sherman Act, 15 U.S.C. § 1, *et seq*.
- 797. During the Class Period, Defendants entered into a series of agreements designed to create profit or limit liabilities amongst themselves by coordinating the manipulation of Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives, by conspiring to, *inter alia*: (a) make false bids and offers for Yen money market instruments; (b) arrange for sham transactions between co-conspirators; and (c) coordinating manipulative trading of Euroyen-based derivatives, designed to artificially suppress, inflate, maintain, or otherwise alter Yen-LIBOR, Euroyen TIBOR, and the prices of Euroyen-based derivatives.
- 798. This conspiracy to manipulate and fix the prices of Euroyen-based derivatives caused injury to both Plaintiff and members of the Class because it destroyed the legitimizing price discovery function of the Yen money market and deprived them of the benefit of a legitimate and accurate Yen-LIBOR and Euroyen TIBOR that reflected actual money market

conditions. As a result, Plaintiffs and members of the Class were deprived of the ability to accurately price Euroyen-based derivatives entered into during the Class Period and to accurately determine the settlement value of Yen-LIBOR-based interest rate swaps and options, Yen foreign exchange forwards and other Euroyen-based derivatives. Plaintiffs and members of the Class thus received, during the term of their transactions and upon settlement, less in value than they would have received absent Defendants' conspiracy and overt acts taken in furtherance thereof.

- 799. The conspiracy is a *per se* violation of § 1 of the Sherman Act. Alternatively, the conspiracy resulted in substantial anticompetitive effects in the over-the-counter Euroyen-based derivatives market. There is no legitimate business justification for, or pro-competitive benefits caused by, Defendants' conspiracy and overt acts taken in furtherance thereof. Any ostensible pro-competitive benefits are pretextual or could have been achieved by less restrictive means.
- 800. As a direct, material, and proximate result of Defendants' violation of § 1 of the Sherman Act, Plaintiffs and the Class have suffered injury to their business and property, within the meaning of § 4 of the Clayton Act, throughout the Class Period.
- 801. Plaintiffs and members of the Class seek treble damages for Defendants' violations of §1 of the Sherman Act under §4 of the Clayton Act.
- 802. Plaintiffs and members of the Class also seek an injunction against Defendants, preventing and restraining the violations alleged above, under § 16 of the Clayton Act.

THIRD CLAIM FOR RELIEF

(For Violation of the Racketeer Influenced and Corrupt Organizations Act (RICO))

18 U.S.C. §§ 1961 et seq.

Against All Defendants

803. Plaintiffs incorporate by reference and re-allege the preceding allegations, as though fully set forth herein.

Defendants Engaged In Conduct Actionable Under RICO

- 804. 18 U.S.C. § 1962(c) makes it illegal for "any person employed by or associated with any enterprise engaged in, or the activities of which affect, interstate or foreign commerce, to conduct or participate, directly or indirectly, in the conduct of such enterprise's affairs through a pattern of racketeering activity or collection of unlawful debt."
- 805. 18 U.S.C. § 1962(d), in turn, makes it "unlawful for any person to conspire to violate any of the provisions of subsection (a), (b), or (c) of this section."
- 806. Under 18 U.S.C. § 1961(1), and as applicable to Section 1962, "racketeering activity" means (among other things) acts indictable under certain sections of Title 18, including 18 U.S.C. § 1343 (relating to wire fraud).
- 807. 18 U.S.C. § 1961(5) provides that, to constitute a "pattern of racketeering activity," conduct "requires at least two acts of racketeering activity, one of which occurred after the effective date of this chapter and the last of which occurred within ten years (excluding any period of imprisonment) after the commission of a prior act of racketeering activity."
- 808. 18 U.S.C. § 1961(3) defines "person" as "any individual or entity capable of holding a legal or beneficial interest in property," and 18 U.S.C. § 1961(4) defines "enterprise" as "any individual, partnership, corporation, association, or other legal entity, and any union or group of individuals associated in fact although not a legal entity."
- 809. 18 U.S.C. § 1343, the wire fraud statute listed in 18 U.S.C § 1961(1) as a RICO predicate act, provides that "[w]hoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses,

representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such scheme or artifice, shall be fined under this title or imprisoned not more than 20 years, or both."

- 810. At all relevant times, an association-in-fact consisting of Defendants, Defendants' employees and agents, who conducted Defendants' affairs through illegal acts including the transmission of false Yen-LIBOR and Euroyen TIBOR submissions or directing other employees and agents to intentionally manipulate Yen-LIBOR and Euroyen TIBOR rates by wire communications, and the BBA were an "enterprise" within the meaning of 18 U.S.C. § 1961(4).
- 811. At all relevant times, Defendants were "person[s]" within the meaning of 18 U.S.C. § 1961(3).

Defendants Conducted the Affairs of A RICO Enterprise

812. Defendants' association-in-fact, through their frequent and routine communications with each other, their organization of a hub-and-spoke conspiracy through interdealer brokers, association with the BBA and JBA, and participation together as members in the Yen-LIBOR and Euroyen TIBOR panels, constitutes a RICO enterprise. Defendants conducted the affairs of the enterprise through a pattern of racketeering activity by transmitting or causing to be transmitted by use of wires false and artificial Yen-LIBOR and Euroyen TIBOR submissions throughout the Class Period. Within the United States, Defendants would on a regular basis communicate through the mails or interstate commerce by telegraph, telephone, wireless, or other means of communication false or misleading or knowingly inaccurate reports concerning market information or conditions that affect or tend to affect the price of any commodity in interstate commerce. Further, on a daily basis, Defendants caused the enterprise to

transmit an electronic spreadsheet to Thomson Reuters. Through their collusive activities in reporting Yen-LIBOR and Euroyen TIBOR submissions and the daily transmission by use of wires of an electronic spreadsheet setting forth those submissions, Defendants conducted the affairs of the enterprise through a pattern of racketeering activity, knowingly transmitting or causing to be transmitted false Yen-LIBOR and Euroyen TIBOR submissions.

As part of its global settlement with regulators for its manipulation of financial 813. benchmarks, Defendant Rabobank agreed to waive indictment to a one-count criminal information filed in the District of Connecticut by the Criminal Division (Fraud Section) and Antitrust Division of the DOJ charging Rabobank with wire fraud, in violation of 18 U.S.C. § 1343, in connection with, *inter alia*, Rabobank's false reporting of Yen-LIBOR. The one-count criminal information provides that "[b]etween approximately 2005 and at least 2010, Cooperatieve Centrale Raiffeisen-Boerenleenbank B.A., the defendant, through its employees, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, the defendant, through its employees, engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about April 17, 2008, the defendant transmitted or caused the transmission of electronic communications - specifically, (1) an electronic chat between a derivatives trader and a money market trader, (2) a subsequent Yen LIBOR submission from the defendant to Thomson Reuters, and (3) a subsequent publication of a Yen LIBOR rate through international and interstate wires." The Rabobank Criminal Information is attached as Ex. D-4.

814. As part of its global settlement with regulators for its manipulation of financial benchmarks, Defendant RBS Japan pled guilty and agreed to waive indictment to a one-count criminal information filed in the District of Connecticut by the Criminal Division (Fraud Section) and Antitrust Division of the DOJ charging RBS Japan with felony wire fraud, in violation of 18 U.S.C. § 1343, in connection with, inter alia, RBS Japan's false reporting of Yen-LIBOR. The one-count criminal information provides that "[b]etween approximately 2006 and at least 2010, in the District of Connecticut and elsewhere, RBS SECURITIES JAPAN LIMITED, the defendant, through its employees, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, the defendant, through its employees, engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about October 5, 2009, the defendant transmitted or caused the transmission of electronic communications -- specifically, (1) an electronic chat between a derivatives trader employed by the defendant and a derivatives trader employed by the defendant's parent company, (2) a subsequent Yen LIBOR submission from a bank to Thomson Reuters, and (3) a subsequent publication of a Yen-LIBOR rate—through international and interstate wires, at least one of which passed through, among other locations and facilities,

servers located in Stamford, Connecticut." The RBS Criminal Information is attached as Ex. B-3.

815. As part of its global settlement with regulators for its manipulation of financial benchmarks, Defendant UBS Japan pled guilty and agreed to waive indictment to a one-count criminal information filed in the District of Connecticut by the Criminal Division, Fraud Section and Antitrust Division of the DOJ charging UBS with felony wire fraud, in violation of 18 U.S.C. §§ 1342-3, in connection with, inter alia, UBS's false reporting of Yen-LIBOR and Euroyen-TIBOR. The one-count criminal information provides that "[b]etween approximately 2006 and at least 2009, in the District of Connecticut and elsewhere, UBS SECURITIES JAPAN CO., LTD., the defendant, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, the defendant devised and engaged in a scheme to defraud counterparties to interest rate derivatives trades executed on its behalf by secretly manipulating benchmark interest rates to which the profitability manipulating benchmark interest rates to which the profitability of those trades was tied, and in furtherance of that scheme, on or about February 25, 2009, the defendant transmitted or caused the transmission of electronic communications—specifically, (1) an electronic chat between a derivatives trader employed by the defendant and a broker employed at an interdealer brokerage firm, (2) a subsequent Yen LIBOR submission from a bank to Thomson Reuters, and (3) a subsequent publication of a Yen LIBOR rate through international

and interstate wires, at least one of which passed through, among other locations and facilities, servers located in Stamford, Connecticut." *See* Ex. A-4.

816. As part of its global settlement with regulators for its manipulation of financial benchmarks, Defendant UBS AG pled guilty and agreed to waive indictment to a one-count criminal information filed in the District of Connecticut by the Criminal Division, Fraud Section and Antitrust Division of the DOJ charging UBS with felony wire fraud, in violation of 18 U.S.C. §§ 1343 & 2, in connection with, inter alia, UBS's false reporting of Yen-LIBOR and Euroyen-TIBOR. The one-count criminal information provides that "Between approximately 2001 and in or about 2010, in the District of Connecticut and elsewhere, the defendant, UBS AG, unlawfully, willfully, and knowingly, having devised and intending to devise a scheme and artifice to defraud and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, did transmit and cause to be transmitted by means of wire communications in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, which violation affected a financial institution, to wit: the defendant, UBS AG, devised and engaged in a scheme to defraud counterparties to interest rate derivatives transactions by secretly manipulating benchmark interest rates to which the profitability of those transactions was tied, and in furtherance of that scheme, on or about June 29, 2009, the defendant, UBS AG, transmitted or caused the transmission of electronic communications in interstate and foreign commerce, specifically: (1) an electronic chat between a senior derivatives trader employed by a subsidiary of the defendant, UBS AG ("Trader-1"), and a London-based interdealer derivatives broker ("Broker-1"), in which Trader-1 requested assistance from the broker in requesting that other banks sitting on the London Interbank Offered Rate ("LIBOR") Yen panel submit an increased Yen LIBOR rate

favorable to Trader-1's trading positions; (2) a telephone call placed by Broker-1 at Trader-1's request to a Yen LIBOR submitter at another Yen panel bank, in which Broker-1 requested that the submitter increase the panel bank's Yen LIBOR submission that day; (3) an electronic chat between Trader-1 and a junior derivatives trader employed by the defendant, UBS AG, who also served as a Yen LIBOR submitter for the defendant ("UBS Submitter"), in which Trader-1 requested that the UBS Submitter increase UBS AG's Yen LIBOR submission to a rate favorable to Trader-1's trading positions; (4) a subsequent Yen LIBOR submission from the defendant, UBS AG, to Thomson Reuters reflecting an accommodation of Trader-1's request to the UBS Submitter; and (5) a subsequent publication of a Yen LIBOR rate -through international and interstate wires, at least one of which passed through, among other locations and facilities, servers located in Stamford, Connecticut."

817. Defendants completed all elements of wire fraud within the United States or while crossing United States borders. Defendants did so by conducting the affairs of the enterprise through a pattern of racketeering activity, including by: (i) transmitting or causing to be transmitted false and artificial Yen-LIBOR and Euroyen TIBOR quotes in the U.S. or while crossing U.S. borders through electronic servers located in the United States; (ii) transmitting or causing to be transmitted false and artificial Yen-LIBOR and Euroyen TIBOR quotes that were relied on by Thomson Reuters and the BBA and JBA in collecting, calculating, publishing and/or disseminating the daily Yen-LIBOR and Euroyen TIBOR submissions of each Defendant and the daily Yen-LIBOR and Euroyen TIBOR fix that were transmitted, published and disseminated in the United States or while crossing U.S. borders through electronic servers located in the United States; (iii) coordinating their daily Yen-LIBOR and Euroyen TIBOR submissions and their Euroyen-based derivatives trading positions in electronic chats routed through electronic servers

located in the United States; (iv) sending trade confirmations based on manipulated Yen-LIBOR and Euroyen TIBOR rates to counterparties in the United States; and (v) executing sham transactions, including wash trades, through inter-dealer brokers. In total, this conduct constituted thousands of predicate acts of wire fraud.

- 818. It is clear that even though the BBA may be a foreign entity, the elements of the wire fraud were completed in the United States. This is evidenced by many phone conversations, electronic chats, electronic mail made from the Defendants in the United States and false wire submissions to Thomson Reuters in New York. In addition to phone conversations, Defendants would routinely communicate using Bloomberg chat terminals and in internal electronic messaging systems to discuss and receive preferential Yen-LIBOR and Euroyen TIBOR requests and their Euroyen-based derivatives trading positions. Defendants also used electronic Bloomberg chats to communicate information regarding their trading positions and to coordinate their false Yen-LIBOR and Euroyen TIBOR submissions during the Class Period.
- 819. For example, at least some of the electronic chats between Defendants' traders and brokers below were transmitted through servers located in the United States. As part of its factual basis for its Plea Agreement with the DOJ, Defendant UBS Japan admitted as "true and accurate" that "on or about February 25, 2009, a derivatives trader employed by UBSSJ [UBS Japan] (referred to as 'Trader-1') engaged in an electronic chat with an employee of an interdealer broker (referred to as 'Broker-B'). During the chat, Trader-1 asked Broker-B to help influence Yen-LIBOR submitters at other banks to contribute submissions that would benefit Trader-1's trading positions. In response, Broker-B indicated that he would do so. The chat was transmitted through, among other locations and facilities, a UBS server located in

⁹³ Upon information and belief, Broker-B is Broker Defendant R.P. Martin. See supra.

Stamford, Connecticut. Following the chat, Broker-B spoke by telephone with a Yen-LIBOR submitter at a bank other than UBS (referred to as Submitter-F at Bank-F). During that call, Broker-B asked Submitter-F to alter the submitter's contribution for Yen-LIBOR for a particular maturity (or "tenor") in a manner that was consistent with Trader-1's request to Broker-B. Submitter-F acceded to Broker-B's request by changing the Yen-LIBOR contribution from Bank-F in that tenor. Bank-F's LIBOR submissions were then transmitted to Thomson Reuters, which calculated and published the daily LIBOR rates and transmitted those rates electronically to locations around the world. As a result of the change in Bank F's submission that occurred because of these events, a published Yen LIBOR was affected."

820. Further the Defendants, through the BBA, made agreements with the Chicago Mercantile Exchange, in the United States, which helped them to further their illegal acts. To increase interest in Yen futures contracts, the Chicago-based CME proposed that the BBA allow them to use the BBA's LIBOR calculation as the basis for the Futures contracts amounts. Since 2005, New York-based Thomson Reuters has been the BBA's agent for determining and distributing LIBOR. This change was approved by the CFTC and trading, both in the exchange's Chicago trading pits and through the CME's Globex electronic exchange, 94 encouraged the exponential global growth of trading in Yen futures contracts.

821. For example, the CME's agreement with the BBA permitted the Exchange to use BBA LIBOR as the basis for settling Yen futures contracts and to refer to BBA LIBOR in connection with creating, marketing, trading, clearing, settling and promoting Yen futures contracts.⁹⁵

⁹⁴ CME RULEBOOK, Chapters 254 and 254(a) (Chicago Mercantile Exchange, Inc.), available at http://www.cmegroup.com/rulebook/CME/III/250/254/254.pdf.

⁹⁵ *CME* 2012 *Annual Report*, at 8 ("We currently have a licensing and membership agreement with BBA Enterprises Limited and the British Bankers' Association (collectively, BBA) for the use of LIBOR to settle several of our

- 822. Defendants, who were part of the BBA Yen-LIBOR panel, knew that the BBA benefited financially from this relationship with the CME. This contract between the BBA and CME for LIBOR rates, a contract in interstate commerce, underscores the strength of the causal connection between the pricing of LIBOR and the pricing of Yen franc futures, the largest futures contract in the world, and shows that Defendants knew that their manipulation of LIBOR rates would manipulate Yen futures in turn.
- 823. The licensing of LIBOR by the BBA to the CME also constitutes a contract for LIBOR in interstate commerce.
- 824. By transmitting or causing false and artificial Yen-LIBOR submissions to be transmitted electronically to Thomson Reuters and the BBA, and by exchanging Euroyen-based derivative positions and prices, Defendants conducted the affairs of an enterprise through a pattern of racketeering activity which artificially fixed and affected the prices of Euroyen-based derivatives, directly resulting in Defendants reaping hundreds of millions, if not billions, in illicit trading profits on their Euroyen-based derivative positions. By conducting the affairs of the enterprise through a pattern of racketeering activity, including the use of electronic communication to affect the values of futures contracts, such as the Yen Futures Contracts, traded in Chicago, for the purpose of defrauding innocent counterparties with whom Defendants traded.
- 825. The common purpose of the enterprise was simple: profiteering. By engaging in the predicate acts alleged including, but not limited to, transmitting or causing false and artificial Euroyen TIBOR and Yen-LIBOR submissions to be transmitted to Thomson Reuters as agent for

interest rate products, including our Eurodollar contract. For the license, we paid an upfront fee and pay an annual fee. Based on the ongoing review of LIBOR, we expect LIBOR to be reformed rather than replaced and to continue as a regulated benchmark. Depending upon the outcome of the reform efforts, we may need to enter into a new license agreement with BBA or the organization appointed to administer the benchmark").

the BBA, and the JBA and by exchanging Euroyen-based derivative positions and prices,
Defendants affected the prices of Euroyen-based derivatives, rendering them artificial. This
directly resulted in Defendants reaping hundreds of millions, if not billions, in illicit trading
profits on their Euroyen-based derivative positions.

826. Defendants acknowledged the profitability of this scheme on multiple occasions. For example, an electronic chat on August 20, 2007, an RBS Senior Yen Trader commented "its just amazing how libor fixing can make you that much money." Moreover, while traders benefited through increased commissions, Broker Defendants were paid handsomely in the form of bribes and other illicit and illegitimate compensation by UBS traders which sometimes included regular bonuses and bigger salary packages. In one exchange on September 18, 2008, a UBS Trader wrote to a broker employed by Broker Defendant R.P. Martin that "if you keep 6s [six-month Yen-LIBOR] unchanged today....I will f***ing do one humungous deal with you....Like a 50,000 buck deal, whatever....I need you to keep it as low as possible....if you do that....I'll pay you, you know, 50,000 dollars, 100,000 dollars....whatever you want. All right."

<u>Defendants Have Conducted the Affairs of an Enterprise Through a Pattern of</u> <u>Racketeering Activity</u>

- 827. Defendants each committed far more than two predicate acts of wire fraud. As alleged in detail herein, Defendants engaged in at least the following predicate acts of wire fraud:
 - 1. The transmission of false Yen-LIBOR Rates to Thomson Reuters in the United States, for further dissemination;
 - 2. Causing the transmission and dissemination in the United States of false Yen-LIBOR "Fix" by Thomson Reuters as agent for the BBA;

⁹⁶ App. at 45, ¶ 117.

⁹⁷ App. at 84-85, ¶ 214.

- 3. Causing the transmission and dissemination in the United States of false Yen-LIBOR Individual Bank Quotes by Thomson Reuters;
- 4. The transmission of false Euroyen TIBOR Rates from the United States to the JBA;
- 5. Causing the transmission and dissemination in the United States of false Euroyen-TIBOR "Fix" by Thomson Reuters as agent for the JBA;
- 6. Causing the transmission and dissemination in the United States of false Euroyen TIBOR Individual Bank Quotes by Thomson Reuters as agent for the JBA;
- 7. Electronic communications and instant messages that emanated from within the United States or were routed through United States electronic servers with manipulative requests, broker false run thrus and suggested LIBORs; and
- 8. Sending trade confirmations (e-mail, message, telephonic, facsimile) based on manipulated and false Yen-LIBOR and/or Euroyen TIBOR rates to counterparties in the United States.
- 828. The conduct of every party involved in the scheme is not an isolated occurrence. The pattern of racketeering activity herein alleged involved not isolated occurrences but constituted related acts which amounted to a threat of continued criminal activity throughout the Class Period. Each Defendant shared a common purpose in increasing their profits from trading financial instruments priced, benchmarked, settled to or otherwise affected by Yen-LIBOR or Euroyen TIBOR, and also had a common method of conducting the affairs of the enterprise through a pattern of racketeering activity through use of the wires in transmitting false Yen-LIBOR and Euroyen TIBOR reports and placing trades in conformity therewith.
- 829. Defendants acted in a uniform way to conduct the affairs of the enterprise through daily submission and electronic communication of their collusive and artificial Yen-LIBOR and Euroyen TIBOR submissions to the BBA, JBA and Thomson Reuters following uniform procedures used in virtually an identical way every day. As alleged herein, the predicate acts had a closed-ended continuity involving a closed period of repeated conduct in colluding to set Yen-

LIBOR and Euroyen TIBOR, reporting false Yen-LIBOR and Euroyen TIBOR, and trading to benefit therefrom, throughout the Class Period.

The Pattern of Racketeering Activity Was Directed to, and Did Affect, Interstate Commerce

- 830. Through the racketeering scheme described above, Defendants conducted the affairs of the enterprise through a pattern of activity to illegally increase their profits to the detriment of investors in Euroyen-based derivatives residing throughout the United States, and/or transacting in Euroyen-based derivatives within the United States.
- 831. Plaintiffs' allegations herein arise out of, and are based on, Defendants' use of the Internet and/or the wires across state lines as well as agreements between entities in different states to manipulate Yen-LIBOR, Euroyen TIBOR, and the price of Euroyen-based derivatives. Using those interstate channels to coordinate the scheme and transmit fraudulent statements to Plaintiffs across state lines satisfies RICO's requirement of an effect on interstate commerce. Defendants' racketeering acts had a direct effect on interstate commerce.
- 832. The predicate acts affected and made artificial the price of futures contracts which were traded on the CME. These contracts are traded in an open outcry form in Chicago and also electronically on the CME's GLOBEX platform.
- 833. The primary purpose of Defendants' racketeering activity was to benefit the Defendants' derivative trading positions, including the positions in their United States entities.
- 834. In addition, as part of its Plea Agreement, UBS Japan admitted as "true and accurate" that it "entered into interest rate derivatives transactions tied to LIBOR and Euroyen TIBOR such as derivatives, forward rate agreements, and futures with counterparties to those transactions. Many of those counterparties were located in the United States. Those United States counterparties included, among others, asset management corporations, mortgage and loan

corporations, and insurance companies. Those counterparties also included banks and other financial institutions in the United States or located abroad with branches in the United States."

- 835. During the Class Period, numerous instant message chats and emails between UBS Senior Yen Trader Hayes and the Broker Defendants wherein Hayes requested the Broker help influence Yen-LIBOR Submitters to benefit the Trader's trading positions were transmitted through servers located in Stamford, Connecticut or New York, New York. 98
- 836. Therefore, Plaintiffs' allegations satisfy RICO's "interstate commerce" element because the racketeering claims alleged herein arise out of, and are based on, Defendants' use of the internet or the wires across state lines as well as agreements between entities in different states to manipulate Euroyen TIBOR, Yen-LIBOR and the prices of Euroyen-based derivatives. Using those interstate channels to coordinate the scheme and transmit fraudulent statements to Plaintiffs across state lines satisfies RICO's requirement of an effect on interstate commerce.

Plaintiffs Suffered Injury Proximately Caused By the Pattern of Racketeering Activity

- 837. As alleged herein, Plaintiffs and members of the Class are direct victims of Defendants' wrongful and unlawful conduct. Plaintiffs and the Class' injuries were direct, proximate, foreseeable, and natural consequences of Defendants' conspiracy; indeed depriving Plaintiffs and the Class of their money relative to their Euroyen-based derivatives contracts was the very purpose of the Defendants' scheme.
- 838. Plaintiffs and members of the Class are entitled to recover treble damages of the injuries they have sustained, according to proof, as well as restitution and costs of suit and reasonable attorneys' fees in accordance with 18 U.S.C. § 1964(c).

⁹⁸ See, e.g., Ex. A-4.

839. As direct and proximate result of the subject racketeering activities, Plaintiffs and members of the Class are entitled to an order, in accordance with 18 U.S.C. § 1964(a), enjoining and prohibiting Defendants from further engaging in their unlawful conduct.

FOURTH CLAIM FOR RELIEF

For Violation of the Racketeer Influenced and Corrupt Organizations Act (RICO) 18 U.S.C. §§ 1961 et seq.

Against All Defendants

- 840. Plaintiffs incorporate by reference and re-allege the preceding allegations as though fully set forth herein.
- 841. In addition to conducting the affairs of the enterprise through a pattern of racketeering activity, Defendants conspired to violate RICO in violation of 18 U.S.C. § 1962(d).
- 842. Defendants organized and implemented the scheme alleged herein, which required their agreement to report their borrowing rates falsely and to benefit their trading positions, and ensured that it continued uninterrupted, by concealing their violations and the prices of Euroyen-based derivatives from Plaintiffs and the Class.
- participants in the Euroyen-based derivatives market, yet each Defendant remained a participant despite the racketeering nature of their conduct. At any point while the scheme had been in place, any of the participants could have ended the scheme by abandoning the conspiracy and notifying the public and law enforcement authorities of its existence. Rather than stopping the scheme, however, the Defendant chose to continue it, to the direct detriment of Euroyen-based derivatives market participants such as Plaintiffs and members of the Class.
- 844. As alleged herein, Plaintiffs and members of the Class are direct victims of Defendants' wrongful and unlawful conduct. Plaintiffs' and the Class' injuries to their property

were direct, proximate, foreseeable, and natural consequences of Defendants' conspiracy; indeed, such effects were precisely the reason why the scheme was concocted.

- 845. Plaintiffs and members of the Class are entitled to recover treble the damages they have sustained, according to proof, as well as restitution and costs of suit and reasonable attorneys' fees in accordance with 18 U.S.C. § 1964(c).
- 846. As a direct and proximate result of the racketeering activities alleged herein,
 Plaintiffs and members of the Class are entitled to an Order, in accordance with 18 U.S.C. §
 1964(a), enjoining and prohibiting Defendants from further engaging in their unlawful conduct.

FIFTH CLAIM FOR RELIEF

For Unjust Enrichment

Against Contributor Bank Defendants

- 847. Plaintiffs incorporate by reference and re-allege the preceding allegations, as though fully set forth herein.
- 848. To the extent required, this claim is pled in the alternative to Plaintiffs' Sixth Claim for Relief under FED. R. CIV. P. 8(d).
- 849. The Contributor Bank Defendants, individually, and/or through their subsidiaries or affiliates traded Euroyen-based derivatives at a time the Contributor Bank Defendants were actively and systematically manipulating Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives to artificial and anticompetitive levels for their own illicit financial benefit to the detriment of Plaintiffs and Class Members.
- 850. The Contributor Bank Defendants also individually, and/or through their subsidiaries or affiliates are future commission merchants, dealers in the Euroyen derivatives market in the U.S., ⁹⁹ clearing firms, and/or trading members of futures exchanges involved in

⁹⁹ The Contributor Bank Defendants that engaged in Euroyen-based derivatives dealing in the U.S. include at least:

profit-based trading, clearing and/or brokering of Euroyen-based derivatives contracts traded by Plaintiffs and the members of the Class.

- affiliates, financially benefited from the unlawful manipulation. As alleged herein, Contributor Bank Defendants, among other things, intentionally and systematically manipulated Euroyen TIBOR and Yen-LIBOR to artificial levels for the express purpose of obtaining hundreds of millions (if not billions) in ill-gotten trading profits on Euroyen-based derivative contracts held by them and other colluding banks, the prices of which (and thus illicit profits) were benchmarked, traded and price settled to such Euroyen rates. In this regard, for example, Euroyen TIBOR and Yen-LIBOR submitters at the Contributor Bank Defendants, among other things, regularly and improperly coordinated and changed their Euroyen TIBOR and Yen-LIBOR submissions with one another at the request of Contributor Bank Defendants' interest rate derivatives traders employed by them or their subsidiaries or affiliates. These unlawful acts caused Plaintiffs and other members of the Class to suffer injury, lose money, and transact in Euroyen-based derivatives at artificial and manipulated prices.
- 852. Plaintiff Hayman Capital transacted Euroyen-based derivatives during the Class Period directly with Contributor Bank Defendants, including Defendants Barclays, Deutsche, JPMorgan, and Merrill Lynch. *See* ¶¶ 53, 64, 66, 81, 91, *supra*.
- 853. It is unjust and inequitable for Contributor Bank Defendants (and/or their subsidiaries or affiliates) to have enriched themselves in this manner at the expense of Plaintiff Hayman Capital and similarly situated members of the Class, and the circumstances are such that equity and good conscience require the Contributor Bank Defendants to make restitution.

⁽i) Bank of Tokyo-Mitsubishi; (ii) Barclays; (iii) Citigroup; (iv) Deutsche; (v) HSBC; (vi) JPMorgan; (vii) Mizuho; (viii) RBS; (ix) Société Générale; (x) Sumitomo Mistsui Banking Corp; and (xi) UBS.

854. Each Contributor Bank Defendant should pay restitution or its own unjust enrichment to Plaintiff Hayman Capital and similarly situated members of the Class.

SIXTH CLAIM FOR RELIEF

For Breach of The Implied Covenant of Good Faith and Fair Dealing Against Defendants Barclays, Deutsche, JPMorgan, and Merrill Lynch

- 855. Plaintiffs incorporate by reference and re-allege the preceding allegations, as though fully set forth herein.
- 856. To the extent required, this claim is pled in the alternative to Plaintiffs' Fifth Claim for Relief under FED. R. CIV. P. 8(d).
- 857. Plaintiff Hayman Capital entered into binding and enforceable contracts with Defendants Barclays, Deutsche, JPMorgan and Merrill Lynch in connection with Euroyen-based derivatives ("contracts"), for example, Yen-LIBOR-based interest rate swaps and options.
- 858. Each of the contracts includes an implied covenant of good faith and fair dealing, requiring each contracting party to act in good faith and deal fairly with the other, and not take any action which will have the effect of destroying or injuring the right of the other party to receive the fruits of the contract.
- 859. Defendants Barclays, Deutsche, JPMorgan, and Merrill Lynch breached this duty and, without reasonable basis and with improper motive, acted in bad faith by, among other things, (i) intentionally submitting false and artificial Yen-LIBOR and/or Euroyen TIBOR submissions to the BBA and/or JBA for the express purpose of obtaining ill-gotten profits from their Euroyen-based derivatives positions; (ii) using the Broker Defendants (among others) to disseminate false market information; and/or (iii) colluding directly with employees at other

Contributor Panel Banks, either directly or through brokers, in order to manipulate Yen-LIBOR, Euroyen TIBOR and the prices of Euroyen-based derivatives.

860. As a direct and proximate cause of these breaches of the implied covenant of good faith and fair dealing and of Defendants' frustration of the purposes of these contracts, Plaintiff Hayman, and similarly situated members of the Class, have been damaged as alleged herein in an amount to be proven at trial.

PRAYER FOR RELIEF

Accordingly, Plaintiffs demand relief as follows:

- A. For an order certifying this lawsuit as a class action pursuant to Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure, and designating Plaintiffs as the Class representatives, and their counsel be appointed as Class counsel;
- B. For the unlawful conduct alleged herein to be adjudged and decreed to be an unlawful restraint of trade in violation of Section 1 of the Sherman Act;
- C. For the unlawful conduct alleged herein to be adjudged and decreed to be an unlawful enterprise in violation of RICO;
- D. For Defendants, their subsidiaries, affiliates, successors, transferees, assignees and the respective officers, directors, partners, agents, and employees and all other persons acting or claiming to act on their behalf, be permanently enjoined and restrained from continuing and maintaining the conspiracy alleged in the Complaint;
- E. For a judgment awarding Plaintiffs and the Class damages against Defendants for their violations of the federal antitrust laws and RICO, in an amount to be trebled in accordance with such laws;

- F. For a judgment awarding Plaintiffs and the Class restitution of any and all sums received by the Contributor Bank Defendants' unjust enrichment;
- G. For an award to Plaintiffs and the Class of their costs of suit, including reasonable attorneys' and experts' fees and expenses; and
 - H. For such other and further relief as the Court may deem just and proper.

DEMAND FOR A JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs respectfully demand a trial by jury of all issues so triable.

Dated: July 24, 2015 White Plains, New York

LOWEY DANNENBERG COHEN & HART, P.C.

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